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Number.....

INTRODUCTORY LETTERS,

REFERRED TO ON PAGE X. OF PREFACE.

I.—*From* WILLIAM CUNNINGHAM, D.D., *Professor of Divinity and Church History, New College, Edinburgh.*

EDINBURGH, *October* 28, 1850.

MY DEAR SIR,—I have read carefully your treatise "On the Unity of the Human Races," recently published at New York, and I regard it as a very masterly and valuable work. It displays a thorough knowledge of the subject, and of all that has been written upon it down to the most recent productions. The argument is conducted with much ability, and is brought to a triumphant conclusion. As in all probability the subject will be fully discussed in this country at no distant period, I would reckon it an important service to the cause of truth and of divine revelation, if your work were republished among us.—I remain, &c.,

REV. DR THOMAS SMYTH. WM. CUNNINGHAM.

II.—*From* ROBERT S. CANDLISH, D.D.

EDINBURGH, *November* 15, 1850.

MY DEAR SIR,—I rejoice to learn that your very valuable work "On the Unity of the Human Races" is about to be republished in this country, under your own superintendence, and with the advantage of your latest improvements. I am not qualified to offer an opinion in regard to the learning and research of your volume, beyond expressing my admiration of the copiousness, variety, and completeness of your information.

I can better appreciate your lucid order and admirable method, as well as the clear and satisfactory nature of the whole of the argumentative discussion.

I consider your book to be the most comprehensive manual we can well have on this all-important subject; and I look upon it as a signal and seasonable service rendered to the cause of divine truth.—I am, &c.,

(Signed) ROB. S. CANDLISH.

III.—*From* ALEXANDER DUFF, D.D., *of Calcutta.*

CARGILL, BY PERTH, *August* 20, 1850.

DEAR SIRS,—The work of the Rev. Dr Smyth of Charleston, "On the Unity of the Human Races," I have perused with no ordinary pleasure. In connection with the cause, alike of humanity and of revelation, the subject treated of is one, not of second-rate, but of first-rate importance. And the treatment of it, as conducted in Dr Smyth's volume, may well be characterized as scholar-like without pedantry, elaborate without tediousness, comprehensive without diffuseness, and argumentative without dryness. With a few omissions in the arrangement of the materials, which on revision will doubtless occur to the learned author himself, I would earnestly recommend you to secure the reprint of the volume in this country, as a volume eminently fitted for extensive popular usefulness.—Yours, &c.,

ALEXANDER DUFF.

IV.—*From* JAMES HAMILTON, D.D., *English Presbyterian Church, Regent Square, London.*

7 LANSDOWNE PLACE,
July 9, 1850.

MY DEAR SIR,—Accept my best thanks for the copy of the book which you have been so kind as to send to me. I have already perused several chapters with much interest and

instruction, and am thankful that you had health to complete a work which will be the great magazine of information on this controversy. At first it struck me, that in the British reprint it might be well if you could omit some of the learning, so as to adapt it more to popular use: but as I proceeded, I changed my opinion. *Learning* is so pre-eminently its characteristic, that to omit any of the curious facts or references to out-of-the-way authorship, would be to impair its value. As it stands, it is the book which you yourself alone among ministers could have written; and as it stands, it will be the more valuable to professional men. However, it might be well if you could secure leisure to bring out the essence of the argument in some brief and popular form—like your "Life of Calvin"—over and above the original work. With much respect and esteem, I remain, &c.

REV. DR SMYTH. JAMES HAMILTON.

V.—*From* JOHN BROWN, D.D., *Professor of Theology to the United Presbyterian Church.*

EDINBURGH, ARTHUR'S PLACE, NEWINGTON,
June 10, 1850.

MY DEAR DOCTOR SMYTH,—I thank you cordially for the present of your work "On the Unity of the Human Races." On receiving it, I thought it a *kind*, I now know it to be a *valuable* gift. The subject is a wide and important one. At the expense of much reading and thought you have mastered it, and produced a work greatly fitted to be useful to the cause both of true science and of Christian evidence. With such alterations as you mentioned to me in conversation, the republication of the work in this country would, in my apprehension, be highly desirable. The question must be more agitated in this country than it has yet been—and it is better to use a preventive than a cure, when it can be done. Heartily wishing you success in your numerous and diversified labours of usefulness, and earnestly praying that your European tour may re-establish your health, I am, &c.

REV. DR SMYTH. JOHN BROWN.

VI.—*From the* Rev. William Symington, D.D., *of Glasgow.*

Annfield Place, Glasgow,
October 8, 1850.

My Dear Sir,—It is only within these few days that I have got through your work "On the Unity of the Human Races." It requires considerable time to read it, and still more to master the argument; but the satisfaction it affords in the end, fully rewards one for the effort. The subject is in a good measure new to me, having had little previous acquaintance with it, except what was gathered from some ethnological articles in the Reviews, and a hasty glance at Pickering's able work. But, after the perusal of your volume, so replete with learning, so patient in research, and so conclusive withal in its reasoning, no one can plead ignorance. The topic is one of great moment, and you have, in my opinion, handled it in a way that entitles you to the gratitude and approbation of every friend of scriptural and scientific truth.—Believe me, &c.

Rev. Dr Smyth. WILLIAM SYMINGTON.

VII.—*From the* Rev. David King, LL.D., *of Glasgow.*

Glasgow, *August* 4, 1850.

My Dear Sir,—I thank you very sincerely for the copy of your important work "On the Unity of the Human Races." It discusses many points to which I have not given my attention particularly, and regarding which, therefore, I can offer no informed or decided opinion. But every one must admit, that the general subject is of high consequence, and you have brought to the investigation of it no ordinary amount of ability and research. A republication of the work in this country, with such modifications in it as you will see proper to be made, might prove, I think, of great value.—I am, &c.

DAVID KING.

VIII.—*From the* Rev. Henry Cooke, LL.D., *of Belfast.*

Belfast, *October* 25, 1850.

My Dear Dr Smyth,—Your work "On the Unity of the Human Races," I have read with attention, and, I trust, with profit. So early as the year 1807, my thoughts were turned to the subject by reading Kame's "Sketches of the History of Man;" and since that time, I have occasionally examined some of the writers who support the theory of various origins. The doctrine of the unity of origin I believe, not merely because I find it unequivocally taught in the divine Scriptures, but also because I find it supported by such numerous analogies, in the cases of plants and animals, which are so wonderfully influenced and externally changed by climate, habitat, and human management; and still farther, by such a Baconian induction of facts, that it seems to me impossible to admit the soundness of the Baconian principles of philosophizing without arriving with you at the same conclusions.

I believe that, by this work, you have done the cause of truth and humanity a great and lasting service, not lessened by the candour with which you have treated your opponents, while it is enhanced by the potent research and lucid arguments by which you have illustrated and confirmed your own views.—Yours in the gospel,

H. COOKE.

IX.—*From the* Rev. Robert Halley, D.D., *of Manchester.*

Manchester, *August* 15, 1850.

My Dear Sir,—I have read your work "On the Unity of the Human Races" with great interest and delight. I think the argument is conducted with great ability, and the illustrations admirably selected, and very appropriate. It is a work of great importance at the present time, and will, I think, obtain the circulation it so well deserves.—Yours most truly,

Rev. Dr Smyth. ROBERT HALLEY.

X.—*From the* Rev. Leonard Bacon, D.D., *of New Haven, United States.*

Dalton, *November* 6, 1850.

Dear Sir,—The extraordinary pressure of my engagements between the date of the publication of your work "On the Unity of the Human Races," and the time of my leaving home, did not permit me to read the book with the close attention which is due to so thorough and elaborate a work on so important a subject; yet I may be allowed to thank you for the diligence and zeal with which you have undertaken the discussion, and to acknowledge the ability with which you have exhibited theological and historic arguments for the original unity of all the races of mankind. The moral, political, and religious bearing of the question invest it with the very highest importance. I rejoice that, among the clergy of Charleston, there has been found one to vindicate, by physiological reasoning, the specific unity of all men, as a fact in natural history, against the Socialism that would make a distinct species of each human variety—and another to maintain, so effectively, the descent of all nations from one parentage, against the hasty conclusions that would assign a multiform origin to the common humanity of our species.—Respectfully yours,

Rev. Dr Smyth. LEONARD BACON.

XI.—*From* R. G. Latham, Esq., M.D., *Member and Vice-President of the Ethnological Society, London, and author of works on the "Varieties of Man," "The English Language," &c.*

My Dear Sir,—I have been so much in locomotion for the last fortnight, that your kind and gratifying letter has only just reached me.

Your book, too, which you have so courteously favoured me with, has yet to be read with due care. I have as yet only had time to get a general view of its principles, and the learning and ingenuity which supports them. I am glad that

the doctrine of what I call the *Multiplats Protoplasts* has been fairly grappled. Though bearing importantly upon natural history in general, the ethnologist must be the chief investigator of it. I think it not likely to find much difference in our views on the point.

R. G. LATHAM.

XII.—*From the* Rev. JAMES M'COSH, LL.D., *author of "The Method of the Divine Government, Physical and Moral."*

MY DEAR SIR,—I have carefully read your work "On the Unity of the Human Races," and I have risen from the perusal with a deep impression of its value and importance. The reading of the author is evidently extensive, and the treatise is well written and well reasoned. In the biblical and historical departments, it seems to me to be particularly successful. I am not acquainted with the views of Agassiz, who seems unfortunately to have broached of late opinions adverse to the Unity of the Human Races; but, with the assistance of Prichard and Bachman, you have, in natural history, effectually disposed of the old objections. You have thus furnished a valuable defence of a portion of truth, which has several most important bearings both on religion and morality.

JAMES M'COSH.

XIII.—*From the* Rev. DAVID BROWN, *Glasgow, author of a work on the Second Advent, &c.*

GLASGOW, *October* 10, 1850.

MY DEAR SIR,—You have done a great service to truth, by your seasonable work "On the Unity of the Human Races" —one of those mixed questions which belong alike to the domains of Science and of Scripture. That the investigations of the former should, on this subject, appear to jar with the utterances of the latter, will startle no one who knows with what hostility to revelation the inquiries of naturalists in other departments were once imagined to be fraught—nay,

rather recollecting how those inquiries have resulted in new and beautiful confirmation of divine truth, there cannot but arise, even out of that seeming discrepancy, the joyous conviction, that here also scientific researches into the natural history of the human races—prosecuted in a comprehensive, patient, and modest spirit—will, in proportion as they advance, be recognised as in harmony with the Bible. Meanwhile, all rashness on either side is to be deprecated. If the attempt to prove a *diversity* of original races from the book of Genesis be absurd, let us, on the other hand, rise above the temptation to enlist the facts of the naturalist on the side of *unity* a hair's-breadth farther than present investigation will warrant. We know, indeed, what is at stake. That the original unity of the human family is absolutely vital to Christianity, there can be no doubt in the mind of any one competent to judge on the point. But if the caution be used by the naturalist in generalizing on his facts, I have no fear for the result. There may come a time when physical research will yield irrefragable evidence of the unity of the human races. But what if that time should never come? If the testimony of science be found not *inconsistent* with revelation, it is all we can absolutely demand of the Author of both.

Should the unity of the human family be discoverable only from the Bible, while nothing in its natural history is found to teach the contrary, with this state of matters the friends of revelation may rest content; assured that the deep instincts of the human breast, and every social, moral, and religious consideration, will come trooping to the aid of the biblical doctrine, and so rivet the faith of it in every well-regulated mind, as to render such negative conclusions of science innocuous.

The research, Rev. and Dear Sir, which you have brought to bear upon this subject, the candour which you have manifested, and the ability with which you have discussed the question, alike in its physical and its moral bearing, have laid the friends of the unity of the human family under a deep debt of gratitude to you, and I trust the reprint of your work in this country, will tend to fortify the lovers of science and of Scripture against the fascination of honoured names on the side of error.—I am, &c.

DAVID BROWN.

XIV.—*From the* Rev. J. H. Fowles, *Episcopal Minister, Philadelphia, United States.*

Philadelphia, *September* 23, 1850.

My Dear Sir,—Your late work "On the Unity of the Human Races," together with a note, was left at my house during my usual summer vacation. On my return last week, I was pleased to turn my attention to it; and am convinced that you have treated the subject in an able and interesting way, and that you have done the cause good service. Trusting that your labour may be recompensed by the amount of good which it accomplishes, and that all your expectations in it may be realized,—I remain, &c.,

J. H. FOWLES.

To the Rev. Thomas Smyth, D.D.

XV.—*From* J. G. Lorimer, D.D., *St David's Free Church, Glasgow.*

My Dear Doctor,—I have finished this morning the work "On the Unity of Races." It is truly admirable—in every respect first-rate. It contains by far the best discussion of the subject, with a view to the Scripture doctrine, which I have ever seen. I trust it will be duly appreciated, and prove extensively useful.—Believe me, &c.

Rev. Dr Smyth. J. G. LORIMER.

XVI.—*From the* Rev. J. Pye Smith, D.D., F.R.S., *Author of Geology and Scripture, &c. &c.*

This work of the Rev. Dr Smyth I have perused with much satisfaction. He has collected a vast variety of arguments and evidences, which establish, with accumulated force, his position—the Unity of the Human Races, as to both species and origin. I think it impossible for an upright mind to refuse acquiescence in his conclusion. With him, too, I agree that there are difficulties, as in all science, which we cannot

at present remove; but, weighed against the positive arguments, they cannot rationally arrest our conviction. It is to be expected that the progress of observation and the augmentation of accurate knowledge in meteorology, actinology, terrestrial magnetism, and probably some agencies in natural history not yet thoroughly understood, will contribute much to the resolving of the perplexity. There may also have been something preternatural in a judicial infliction upon HAM. Gesenius tells us from Plutarch, that this term, in the old Coptic, denotes both *heat* and *blackness*. It might be a case somewhat analogous to that of Gehazi. (2 Kings vi. 27.) The want of scholarship, the presumptuousness, the irreverence, the impiety, with which some writers in the United States treat the Scriptures, is disgusting.

It appears that the able and pious author has been hurried and distressed in the composition of this very desirable work. He probably employed persons to collect materials for his numerous references, who were either uninformed or careless; and evidently the book was printed far from his eye. A revised edition would be a welcome acquirement.

Yet, if this be not obtained, the work, in the hands of candid readers, earnest for TRUTH, will be found a treasure.

J. PYE SMITH, D.D., F.R.S.

GUILDFORD, *Dec.* 23, 1850.

OPINIONS OF THE PRESS.

I.—OF THE WORK AS IT APPEARED FOR SUBSTANCE IN NUMBERS.

A series of admirable papers, from the pen of the Rev. Thomas Smyth, D.D., has recently appeared in the columns, respectively, of the *Southern Presbyterian* and *Southern Baptist*, both published at Charleston, S.C., in which the author has aimed to establish "The Unity of the Human Races," as "The doctrine of Scripture, Reason, and Science," and we think with signal success, and certainly with commanding ability. In concluding their publication, the *Presbyterian* says: "We are glad that so full and able an exposition of the subject has been made. We hope they will some day be gathered, and put before the public in a more permanent form." We concur with this hope, and trust that such a purpose may not be long delayed.—*True Union, Baltimore.*

The question of the Unity of the Races has become *the question* of the day, and is likely to become one of increasing and absorbing interest to the cause of inspiration, humanity, and missionary effort. We have been much gratified to know that the series of articles thus far published by ourselves, and several other religious papers, has been read with deep interest in almost every section of our country.—*Southern Presbyterian.*

The first of a series of articles from the pen of Rev. Dr Smyth of Charleston, on the "Unity of the Races," appeared in our last Number; the second will appear next week. This is a deeply interesting subject, and the distinguished writer is well qualified to do it justice.—*Cincinnati Presbyterian.*

The articles on this subject close with the present Number. Our readers will agree with us that they are able, learned, and elaborate —much the most instructive essays to be met with on that subject. —*S. Presbyterian.*

As a general thing, we do not like serial articles in a newspaper —our readers, for the most part, we presume, are of the same mind. Yet there are some subjects proper for discussion in a weekly religious paper which cannot be dispatched in a single article. That which is employing the pen of Dr Smyth, in the numbers which

appear weekly on our first page, is of this sort. We dare say thousands of our readers have been interested and edified in the perusal of those masterly and elaborate articles; which, by the way, ought to be reproduced in a volume, and which we understand will probably be the case.—*Southern Christian Advocate.*

In this Number also, the first part of the series of articles by the Rev. Dr Smyth, on the "Unity of the Races," is completed. And though we have had no intimation of the fact, we have no hesitancy in expressing the belief that they will soon be put, as they ought to be, in a more permanent form. We seldom see in a newspaper a series of articles on any subject which evince the same amount of labour and research; and as a defence of one of the outposts of Christianity, which both the learned and superficial have at times assailed, it seems to us altogether unanswerable.—*Richmond Observer.*

It is with great pleasure that I have learned your intention of publishing the work of Rev. Dr Smyth, on the "Unity of the Races." I have had the opportunity of examining several parts of the work, and can truly say, that for solid learning, fair and concise statement, and lucid reasoning, it is the best work I know on that subject.—*Rev. Wm. A. Plumer, D.D.*

II.—OF THE WORK AS ISSUED IN NEW YORK, FROM THE AMERICAN PRESS.

From the LITERARY WORLD *of New York.*

This question of the "Unity or Diversity of the Human Races," is at this moment engaging the attention of the friends of science and religion in Europe and America, with deep and peculiar interest. It is discussed, on the one hand, purely as a question of natural science. The present volume, by the Rev. Dr Smyth of Charleston, S. Carolina, treats the question as inseparably connected with the Mosaic history and the truth of Scripture. This truth he fortifies and establishes by the results of scientific argument and research. His view of the necessary connection between the theologic and scientific points of view is forcibly stated in this expression, "Unless all men have descended from Adam by ordinary generation, they cannot, according to the Bible, have any part or lot in the great salvation." In the city of Charleston, S. Carolina, there has existed for many years, a "Literary Conversation Club," composed of gentlemen of scientific and literary pursuits. The question of the "Unity or Diversity of the Human Races," has there been long and earnestly discussed. Mr Smyth's work is the result of his defence of the unity side at the discussions of this club.

From the New York Observer.

This volume contains an elaborate and able discussion of a question which is now attracting a large measure of attention. "In 1846," says the author, "during the visit of Professor Agassiz, this question was discussed by the Literary Conversation Club of Charleston, when I was led to the formation of the plan of this volume. The interest awakened by the publication of Dr Nott's Lectures, in further examination of this question, and especially in its relations to the Bible, induced me to prepare three discourses on the Unity of the Human Races, which were delivered in Charleston in November 1849. At the same time, the publication of a series of articles upon the subject was commenced in the 'Southern Christian Advocate,' the 'Southern Baptist,' the 'Southern Presbyterian,' the 'New Orleans Presbyterian,' the 'Presbyterian of the West,' and in the 'Watchman' and 'Observer' of Virginia. These articles, modified and elaborated, constitute the present volume. They were written amid the numerous occupations of a pastoral charge, and the growing infirmities of feeble health.

"My object has been, to take a comprehensive survey of the whole subject in its relations to Scripture, reason, and science. The argument is cumulative; and the conclusion, therefore, depends not on any one line of reasoning, but upon the combined effects of all. Some are in themselves incomplete, and others only presumptive; but, on the doctrine of probability, it may appear that the concurrence of so many distinct lines of proof in establishing the original unity of the human races, is equal to the clearest demonstration."

Dr Smyth deserves the thanks of the Christian public for his learned and effective labours in the cause of truth. Infidelity has received more than one withering rebuke at his hands.

Professor Agassiz's professional reputation may give some currency to his assertions; but the facts and reasonings set forth in this volume, and others of a kindred nature, will keep all sincere inquirers after truth from doubting the truth of the declaration, that "God hath made of one blood all nations of men."

From the Presbyterian *of New York and Philadelphia.*

The views of Professor Agassiz have been so widely circulated, and have attacted so much attention, that we are glad they have been carefully, and with great ability, reviewed in this masterly work. In defending the Scriptural and only rational doctrine on this subject, Dr Smyth has done good service to the cause of truth, and has added to his own reputation as a man of learning and patient research. This volume should be widely read, and we trust it will speedily find its way into public and private libraries.

Second Notice.

We are pleased to learn that Dr Smyth's recent work on the unity of the human races is about to be republished in Edinburgh,

where it has been favourably noticed by some of the leading and master minds in the Free Church. It was noticed briefly and favourably in our paper on its first appearance; and we take the opportunity of again directing attention to it, as an able and conclusive refutation of the infidel argument of Professor Agassiz and others; which, in despite of Scripture, would make the races of men of different blood, and trace them to different origins. Professor Agassiz professes not to be an unbeliever, and yet he has lent the influence of his reputation to the subversion of one of the plainest teachings of Scripture. Dr Smyth meets him and his coadjutors at all points; and not only establishes the Scriptural statement, but wields a true science against a science falsely so called. We are surprised at the slender grounds on which scientific men are ready to erect a theory, and at the reckless boldness with which, at the hazard of reputation, they publish their immature thoughts to the world. We advise them, in their future tilts, not to endanger the little brains they may possess by running against a stone-wall. The Scriptures are impregnable, and they are impregnable because they are true. They have withstood all previous assaults; the severer the test to which they have been subjected, the more signal has been their triumph; and the very science which has been appealed to for the overthrow of their authority, has ultimately turned out to be their handmaid.

From the New York Journal of Medicine.

The object of the author has been, in the preparation of this volume, " to take a comprehensive survey " of the unity of the human races " in its relation to Scripture, Reason, and Science." The deep interest surrounding the natural history and origin of man, renders it one of the first subjects of science ; and, in the language of Dr S., " even were the question it involves less remarkable and less important, in regard to the present and future condition of the species, the methods of argument and sources of evidence are such as may well engage and engross every scientific inquirer." There has of late been thrown around the question of the unity of origin, doubts, and the author of this book has made a thorough and scientific attempt to clear up these doubts, and in a logical and Christian-like manner he has proved himself competent to the task he has undertaken. We have only space to subjoin the following extract :—

" To the clear and certain establishment of the truth involved in this question, *it is, we think, essential, that its twofold character should be borne in mind.* So long as naturalists were agreed that unity of species argued unity of origin, the question might be regarded as single, and one of exclusively scientific character. But since the theory has been introduced and sanctioned by Professor Agassiz, that *the same species* may have been created in many different provinces, and over their whole extent, the question of origin must be regard-

ed as entirely distinct from the question of specific unity. The former is a question of fact, to be decided by historical evidence. The latter is a question of scientific observation and induction. The question of origin, therefore, can be determined only by the evidence of Scripture, history, tradition, language, religion, and the adaptations of Christianity to the mind and heart of all men. The question of species is to be tested by those criteria which are employed to fix the classification of other animals. Between these questions there need be, and there ought to be, no collision, since the infallible certainty of the *single origin* of the human races, leaves the scientific investigation of their *present* specific character and classification altogether untrammelled, so that it might even be found convenient to regard as distinct species what are now considered as only varieties, and yet leave their unity of origin to be decided by its appropriate evidence.

From the Southern Medical and Surgical Journal.

Amongst the various questions which are at this time under the discussion of men of science, none possess more interest, or are entitled to a larger share of attention, than those connected with the natural history of man. The doctrine of the unity of the human races has been admitted, and is yet received by the great mass of the Christian world, but there are able, scientific men, who dissent from this doctrine, and their efforts for its overthrow have brought into the field some equally able advocates of human unity. Among the ablest of these last, are Drs Bachman and Smyth, both of Charleston.

Dr Smyth's work is devoted to " a comprehensive survey of the whole subject in its relations to Scripture, Reason, and Science." It evinces great ability and research, and its positions are sustained by facts and arguments of great interest and force. A careful perusal, we think, will scarcely fail to lead the reader to adopt Dr Smyth's conclusion, that all the races of men have sprung from one pair. Professor Agassiz, and some others who hold to the plurality of origin of the human races, profess to rest their theory on the declarations of Scripture; upon this question Dr Smyth's argument is complete and unanswerable, and such must be the conclusion of every impartial reader, even should he incline to the views of Agassiz in other particulars.

Dr Smyth's work richly merits, and will doubtless have, an extensive circulation. We understand that an edition will soon appear in England, and from some notices we have read, we doubt not it is destined to attract considerable attention, and secure for the author the same high reputation in that country which he now enjoys in his own.

From Stringer and Townsend's International Weekly Miscellany.

The Rev. Thomas Smyth, D.D., of South Carolina, whose work

upon the "Unity of the Human Races," suggested by the recent declarations of infidelity by Professor Agassiz of Harvard College and others, has been published by Putnam, and received with a hearty applause by Christians and scholars, is not, as is commonly supposed, an American author, though he has long resided in this country. He was born in Belfast, in the north of Ireland, and educated at the Royal College in that city, pursuing afterwards his theological studies in London, and at Princeton in New Jersey. He has been eighteen years minister of the Presbyterian Church in Charleston, where he was married, and where he will probably always reside, while in this country. Dr Smyth possesses one of the largest and most valuable private libraries in the United States, and has therefore been able to compose his learned works in theology, history, &c., under advantages but seldom enjoyed by our authors. His chief productions are, Apostolical Succession, 1842; Presbytery and not Prelacy the Scriptural and Primitive Polity of the Church, 1843; Ecclesiastical Republicanism; Ecclesiastical Catechism; Claims of the Free Church of Scotland; Life and Character of Thomas Chalmers, with Personal Recollections; Nature and Functions of Deacons; The Rite of Confirmation Examined; Bereaved Parents Consoled; Union to Christ and his Church; The True Origin and Source of the Mecklenburg Declaration of Independence, with a Continuation on Presbyterianism, the National Declaration, and the Revolution; Denominational Education; Pastoral Memento; Life and Character of Calvin; the Westminster Assembly; and the Unity of the Human Races proved to be the Doctrine of Scripture, Reason, and Science. Dr Smyth has also written largely in the "Biblical Repertory," the "Southern Presbyterian Review," and other periodicals.

From the ALBANY STATE REGISTER.

Professor Agassiz in one of his lectures announced the startling doctrine, that the black races and the white were not descended from the same stock; that we alone can claim Adam as our ancestor, while the progenitor of the Africans must be looked for somewhere else, and have been created at some other time.

This theory of the plurality of origin in the races of men, of course strikes at the foundation of revelation, and virtually denies the account given in the beginning of the book of Genesis. It naturally called forth many replies, of which this, by Dr Smyth, is the most able we have seen. His object is to take a comprehensive survey of the whole subject in its relations to Scripture, Reason, and Science, proving that all men must be of the same original Adamic family; that "God hath made of one blood all nations that dwell upon the face of the whole earth."

We commend this work to our readers for the ability of its argument, and also for its general interest on a subject which has lately excited much discussion. It is not intended for the theologian alone, but will be read with pleasure by all who care for

scientific investigations. Being written with much learning, it contains as full statements of the different points as can be embraced in a work of popular character.

From the SOUTHERN PRESBYTERIAN.

The views of Professor Agassiz have been so widely circulated, and have attracted so much attention, that we are glad they have been carefully, and with great ability, reviewed in this masterly work. In defending the scriptural, and only rational doctrine on this subject, Dr Smyth has done good service to the cause of truth, and has added to his own reputation as a man of learning and patient research. This volume should be widely read, and we trust it will speedily find its way into public and private libraries.

From the WASHINGTON UNION.

The subject-matter of this volume has long since given rise to argument in the scientific world; and, as there are but partial data upon which a just decision could be based, it is not wonderful that the greatest diversity of opinion should have existed. Very recently, the distinguished naturalist, Agassiz, promulgated his opinion on the subject; and stated, that although he looked upon man as forming a unity, yet there was undoubted diversity in the origin of the races. A sketch of these opinions has been published; and it is to be regretted that the Professor did not expand his views, and enter into more satisfactory detail on so interesting a subject, and one concerning which his voice has such a right to be heard. We understand Professor Agassiz, in his outline, to admit that mankind form a unit, but to insist that there were varieties forming the great class, yet totally distinct from each other. He seems unwilling also to grant that the natural causes at work upon our globe could have produced the numerous variations from an original type.

In his examination of the subject, he introduces two great classes of men, terming them the historical and non-historical—to the former of which, as laid down in Biblical history, he attributes the origin of the white races alone.

For support of his argument, he passes over Scriptural authority, since he has assumed it to be undoubted, as far as our historical race is concerned; but, in investigating the origin of the others, he depends upon the analogies which have always held in zoological investigations; and it seems to us that analogy, though termed the weakest form of metaphysical argument, has far more claim on our consideration when the subject is purely one of natural history.

Dr Smyth, who is well known as a learned theological writer, has taken a part in the Charleston conversations on this subject; and for many years, he states, it has formed for him the topic of anxious consideration.

In its discussion, he has divided his book into the relations to Scripture, reason, and science, forming his conclusions, not from the testimony of either division, but by means of a cumulative argu-

ment, based upon the data to be gleaned from the whole. His great theological acquirements have well fitted him to adduce and collate all the lights the Scriptures can afford, and there are many brilliant ones, we must admit. As far as reason is concerned, his argument bears the stamp of a clear, logical mind, and his scientific knowledge appears to be of the highest order. That the subject is most interesting is undoubted ; yet to us it seems a sea of mixed probabilities and doubts ; and Dr Smyth himself admits "that the argument is one of probability, always tending to greater certainty, though it may be incapable of ever reaching that which is complete." The author seems earnestly to have brought every faculty to bear upon his subject, in order that his conclusions might be complete; and we think, as far as it lay in his power, his duty has been faithfully performed, and will be satisfactory to many, though we have not the slightest doubt that he must prepare himself for criticism from many sources. We venture to predict that the book will meet with an extensive circulation, and a careful perusal.

From the CHRISTIAN CHRONICLE *of Philadelphia.*

In a notice, necessarily as short as this must be, it is impossible to give even an abstract of the line of argument which Dr Smyth pursues. He has traversed thoroughly the entire ground in dispute; in fact, he has left no single item untouched, which could add to the cumulative weight of his positions. Having, as we have already remarked, proven from Scripture and history, that all nations descended from two parents, Adam and Eve, he devotes by far the largest portion of the book to the scientific view of the subject; in which he demonstrates that the theory built by Agassiz upon his false analogy between man and the lower animals, is in every respect a most unphilosophic and unscientific one. After a thorough reading of this book, our exclamation was that of the epigrammatist, Martial—"*Ne sutor ultra crepidam,*" which, being freely translated, is—"Mr Agassiz, you had better stick to your fishes, and not meddle with things beyond your province." . . . . . Never have the bulwarks of our religion been so successfully assailed as now. The mere scoffer at all that is pure and good, can do but little injury. But the great luminaries in the literary and scientific firmament; men who are examplers of purity, honesty, sobriety, and, in fact, of all the Christian virtues; and who amid their bewildering theories of cosmogony, physiology, and psychology, have forgotten to consult the inspired and unerring records sent us from heaven, may shed down on the social world a light baneful and blighting as it is brilliant. The Christian ministry, we believe, are to a great extent accountable for the prevalence of these errors. We would not have them deliver scientific lectures from the pulpit; but we deem it vitally important, that those passages of Holy Writ which come within the sphere of science should be so expounded to the people, as to appear not conflicting with true science. Four years since, an anonymous writer of great vigour

published in London, "The Vestiges of Creation." It was republished and read extensively in this country, scattering among our educated youth the seeds of a most baneful philosophy. And yet how many Christian ministers were capable or were willing to expose its monstrous errors? Until the evil is almost ineradicable, no remedy is applied.

We therefore are under great obligations to Dr Smyth for the timely and able defence which he has given us of this cardinal doctrine of our Bible. It behoves the Christian Church to read and circulate its truths, and the Christian ministry to elucidate and enforce them; so that the erroneous views of such men as Professor Agassiz, on this great question, may be consigned, by a competently discriminating public, to that condemnation which they so justly merit.

From Professor Bush, *in the* New York New Church Repository.

In the present instance, the work has been prepared with special reference to a particular state of the question; that is, with reference to the recent work of Dr Nott, Dr Barrett's address before the South Carolina Medical Association, and the views of Professor Agassiz, and others, lately put forth in this country on the opposite side, and as Dr Smyth thinks (except in the case of Agassiz) from a love of infidelity and a hatred of the Bible, rather than any motives for the advancement of science or a true love of knowledge. His primary object, therefore, is to rescue the Scriptures from the grasp of the sceptic, and for that purpose to throw all possible obstacles in the way of those who wish to establish the theory that mankind are descended from more than a single pair. And his task he has performed with a good deal of research, learning, and ability; and besides embodying in his work considerable information, valuable to the general reader, has interspersed it with many sensible remarks and useful suggestions in regard to the manner of conducting the inquiry.

From the Albion.

A very learned and able work: we think Dr Smyth has done good service to the cause of science. We cordially recommend the volume to our readers.

From the Home Journal.

An able work which we commend to philanthropists, physiologists, and anthropologists. The author draws his arguments from reason, scripture, and science, and to our apprehension makes a strong case of the side of the question he espouses.

From the Christian Review.

This work is one of real ability, and deserves the attention of those who desire to examine the subject of which it treats.

From the Courier and Enquirer.

In this work, the Professor's theory is thoroughly reviewed, and an extended and elaborate argument is presented to establish by scripture, reason, and science, the doctrine of the unity of the human races. Dr Smyth is a man of acknowledged ability, and is the author of a number of works upon controverted topics connected with theology. He is a man of learning, a strong, clear reasoner, and a vigorous and effective writer. He has treated the subject with great fulness, and in a manner which entitles his work to general attention and favour. It is published in a very handsome volume, which will be extensively useful.

From the Journal of Commerce.

Doctor Smyth's treatise is elaborate and comprehensive, embracing the whole argument, and presenting in the clearest and most convincing light the various facts, considerations, and inferences, which in their combined effect render the conclusion irresistible, that man was created in one locality only, and in one pair only; that the race descending therefrom was by God's providence dispersed over the earth, its several sections endued with constitutional powers adapted to their respective localities; and that the existing varieties of the human family are analogous in kind and degree to those which distinguish the breeds of the domestic animals, and must be referred to adventitious causes such as climate, situation, food, habit of life, &c. This is the scripture doctrine and the generally received view. The few who question it would be made still fewer if brought to consider the arguments adduced in this volume.

From the Boston Transcript.

This work is based upon a series of popular essays which have appeared in some of the leading religious papers. It is designed to present a comprehensive view of the whole question, as a doctrine of Scripture, science, and reason. The author has devoted many years to the investigation of his subject, and he has treated it with marked ability, and in a very thorough and comprehensive manner.

From the Christian Intelligencer.

This useful book, which has been well received in the community, is much wanted at the present crisis. The work is the substance of a series of articles which appeared recently in various southern periodicals. The argument is cumulative: but when we see so many distinct lines of proof conveying to a single point, we think the unity established in a manner equal to the clearest demonstration. The work will be popular; and Mr Putnam has done good service by publishing it.

From the ALBANY STATE REGISTER.

We commend this work to our readers, for the ability of its argument, and also for its general interest on a subject which has lately excited much discussion. It is not intended for the theologian alone, but will be read with pleasure by all who care for scientific investigations. Being written with much learning, it contains as full statements of the different points as can be embraced in a work of popular character.

From the BALTIMORE PATRIOT.

The work before us is regarded as the ablest and most conclusive argument that has been made in reply to Professor Agassiz, and as such is commended to the general reader. The question, apart from its religious bearing, is one of much interest; and the learning, science, and knowledge which Dr Smyth displays in this work are evidences of his ability to treat it, commensurate with its religious importance and interest.

From the CHURCHMAN.

Professor Agassiz, among others, has recently advocated the theory, that the present varieties of the human races are descended from different stocks—a notion in direct opposition to his former statements on the subject. Dr Smyth's present volume is founded on three lectures delivered by him in Charleston, in 1849, and also on a series of articles published in several southern papers. It shows much learning and research, and very ably demonstrates the truth of the Scriptural account of the origin of all mankind from a single pair, and subsequently from Noah and his sons, and meets the objections founded on the supposed impossibility of such an original. He then enters into a carefully-arranged and ably-conducted positive argument for this unity, drawn from comparative anatomy, the principles of classification, the unity of the species, the nature and connection of language, history, and tradition, and the adaptation of Christianity to all. The unphilosophical assumptions of those who maintain the new theory are satisfactorily pointed out. Professor Agassiz's theory is specially examined, and shown to be inconsistent with Scripture and science. The injurious effects of such a theory on the welfare and prospects of the negro race, is demonstrated in a fervid and Christian spirit. Dr Smyth refers to the ablest authorities; and his work evidences deep thought, as well as sound arguments and scientific knowledge.

From the RECORDER.

The subject of the origin of the human race is exciting a considerable degree of attention among scientific men; and, since the views lately avowed by Professor Agassiz at the meeting of scientific men at Charleston, that interest has extended somewhat more

widely. We are inclined to think that undue weight has been given to his opinions on this subject. As a naturalist he undoubtedly stands high; but we believe that his views on a very important point relative to the movement of the glaciers, have been shown conclusively, by Professor Forbes of Edinburgh, to be incorrect. He had made the glaciers his study for years, and his residence at Neufchatel gave him unusual facilities for that purpose, yet we find that his theories were not sustained by the facts in the case. We are inclined to think, though we would speak with all deference, that the same will be found true in reference to the opinion which he volunteered at Charleston on the origin of the human race. Dr Smyth has read very extensively on the subject, and given a rapid synopsis of the principal facts and reasonings relative to it. The subject is one with which every clergyman should be familiar, that he may be able to meet cavillers and satisfy the inquiries of serious minds. There is no work with which we are acquainted, except the large and expensive one of Prichard, that contains so many important facts bearing on the question as this. We would therefore advise our readers to buy this book and study it.

From Harper's New Monthly Magazine.—Harper & Brothers, *New York.*

The question discussed in the present volume, is one that has excited great attention among modern savans, and more recently, has obtained a fresh interest from the speculations concerning it by the popular scientific lecturer, Professor Agassiz of Harvard University. In many respects, Dr Smyth has shown himself admirably qualified for the task he has undertaken. He brings to the discussion of the subject the resources of great and various learning, the mature results of elaborate investigation, a familiarity with the labours of previous writers, and a lively and attractive style of composition. The argument from Scripture is dwelt upon at considerable length, and though presented in a forcible manner, betrays the presence of a certain tincture of professional zeal, which will tend to vitiate the effect on the mind of the scientific reader. Under the head of the Former Civilization of Black Races of Men, a great variety of curious facts are adduced, showing the original sagacity and advancement in all worldly knowledge and science, by which the family of Ham was distinguished. The testimony of a southern divine of such high eminence as Dr Smyth, to the primitive equality in the intellectual faculties of the Negro and European races, is not a little remarkable, and speaks well for his candour and breadth of comprehension. The discussion of the origin of the varieties in the human race is conducted with great ingenuity and copious erudition, but, it must be admitted, hardly succeeds in making out a case to the satisfaction of the inquirer, who regards the subject only in the light of history and philosophy.

The influence of the theory which he opposes, on the relations of the Southern States, is considered by Dr Smyth to be of a different character from that set forth by many writers. He believes that it would be suicidal to the South in the maintenance of her true position toward her coloured population. The diversity of the Black and White Races was never admitted by the fathers of the country. They always recognised the coloured race which had been providentially among them for two centuries and a half as fellow-beings, with the same original attributes, the same essential character, and the same immortal destiny. The introduction of a novel theory on the subject, Dr Smyth maintains, would be in the highest degree impolitic and dangerous, removing from both master and servant the strongest bonds which now unite them, and by which they are restrained from licentious, immoral, and cruel purposes.

Without reference to many statements, which will produce the widest latitude of opinion in regard both to their soundness and their accuracy, the work of Dr Smyth may be commended as a treatise of the highest importance in the scientific discussion to which it is devoted, abounding in materials of inestimable value to the student, filled with the proofs of rare cultivation and scholar-like refinement, and every way creditable to the attainments and the ability of the author and to the literature of the South.

From the Biblical Repertory and Princeton Review.

We shall not enter into the curious and instructive history of this controversy in its earlier stages; except to say that the battle was waged ever since the modern revival of the subject by Voltaire and his coadjutors in France, Germany, and England, on the question of the Unity of the Species in the Human Race. No one unacquainted with the subject has any conception of the amount of learning and labour drawn into the discussion.

The work of Dr Smyth, the latest on the subject, owes its chief value to the fact that it is a general index, under the form of a resumé of the argument, to a large portion of what has been written on both sides of every view that has been taken of the question. Of its merits we have already spoken in general terms in a former number of our Journal. Besides the extraordinary display of bibliographical research, which we think must add to the reputation which Dr S. has already achieved in this department of study, he may well congratulate himself if his learned work has contributed to precipitate the change of ground which the question has undergone in the hands of Professor Agassiz.

From the Southern Presbyterian Review.

The work of Dr Smyth has been received with high encomiums, both in this country and in Europe, where it is about to be re-

published. It cannot fail to enhance his well-earned reputation for extensive research and varied reading. The reader will find in it a mass of novel and striking facts of the most interesting character, gathered out of the stores of a rich library, and from all departments of learning, and presented, not in the dry and heavy style usual in learned disquisitions, but in a clear, lively, and entertaining manner. We could have wished some alterations in the arrangements of the materials, and occasionally more compactness in the argumentation ; but it furnishes the most ample means for the reader to construct an argument for himself, and directs him to the best sources for further investigations. Our pleasure in reading the volume has been diminished by the conviction that the labours of the author in its preparation were one chief means of inducing the malady which has for a time exiled him from his home, his friends, his church, and his indefatigable efforts in the cause of truth and righteousness.

III.—NOTICES FROM THE BRITISH PRESS OF THE AMERICAN EDITION.

From the WITNESS *of Edinburgh.*

There are two returning errors of a diametrically opposite character which arise out of natural science, and of which the last century has seen several revivals, and the centuries to come must witness many more. The one, that of Maillet and Lamarck, sees no impossible line between species, or even genera, families, and classes ; and so, holds that all animals, the human race as certainly as the others, may have commenced in the lowest forms, and developed during the course of ages to what they now are. The other, that of Kames and Voltaire, recognises in even the varieties of the species impassable lines, and holds, in consequence, that the human race cannot have sprung from a simple pair. And both beliefs are as incompatible with the fundamental truths of revelation as they are with one another. The Lamarckian form of error has been laid on the shelf for a time ; nor will it be very efficiently revived until some new accumulation of fact, gleaned from the yet unexplored portions of the geologic field, or the obscure fields of natural history, and pregnant with those analogical remembrances between the course of creation and the progress of embryology with which nature is full, will give it new footing, by associating it with novel and interesting fact. The antagonist error is at present all alive and active in America, where it has been espoused by naturalists of high name and standing, and it has already produced volumes of controversy. Nor is there a country in the world where, from purely political causes, there must exist a predisposition equally strong to receive as true

the hypothesis of Voltaire. The existence of slavery in the southern provinces, and the strong dislike with which the black population are regarded by the whites throughout the States generally, must dispose the men who hate or enslave them to receive with favour whatever plausibilities go to show that they are not of one blood with themselves, and that they owe to them none of the duties of brotherhood. We have perused with interest and instruction, a very learned and able volume on this subject by the Rev. Dr Thomas Smyth of Charleston, one of the most accomplished Presbyterian ministers of the United States, with whose works on the apostolical succession, and the claims of the Free Church of Scotland, many of our readers must be already acquainted; and who, though residing in the centre of a slave district, and exposed to much odium on the part of the abolitionists, has been the first to come forward in this controversy, to assert, in behalf of the black man, the "unity of the human races," and that all men have fallen in one common father, the first Adam, "created a living soul," and that there is salvation to all in one common Saviour, "the last Adam," made a quickening spirit.

From the SCOTTISH GUARDIAN.

Dr Smyth's work we have read with the greatest interest. It is clear and conclusive throughout; not leaving infidelity a refuge in a single point, whether scientific, rational, or scriptural. It is by far the most complete work on the subject which we have ever seen, adapted to the state of present science and research. It leaves nothing to be desired. We cannot express a better wish for truth, than that, when assailed, she may ever find as accomplished an advocate. The work reflects the highest credit on the talents, learning, scientific knowledge, and Christian spirit of the author. Let us add, that it is creditable to the Christian ministry, planted in the midst of a slave population, and tempted, therefore, to lean to a theory which, in its practical applications, would so far shelter slavery and slaveholders, that its members have come boldly forward to vindicate the unity of the human race, and to teach unpalatable truths in the ears of the powerful. Surely it is in the same degree discreditable to find science and philosophy, ever bountiful of their liberality and charity, in favour of a theory which, if generally adopted, its friends cannot but know would tell injuriously upon the condition and prospects of the negro race.

From the CRITIC.

Science is here viewed in connection with religion. Dr Smyth argues with great power, that the doctrine of Scripture, that the human race sprung from one stock, is literally true; and he meets and answers, *seriatim*, the objections of physiologists who have contended that, because in form, feature, and mental and

bodily organization, the existing races of man differ so widely, therefore they could not have sprung from one common ancestor.

From the Belfast Monitor.

We always hail with lively interest any work from the pen of our much esteemed friend, Dr Smyth of Charleston. From his habits of laborious investigation, close and correct reasoning, and study of general principles, as well as from his fervent love of truth, and his power of composition, we are prepared to find in any work which he publishes a thorough investigation of the subject, and arguments and conclusions which are deserving of the most attentive consideration. We have perused this work with no common interest, designed as it is to expose and refute a number of daring, though specious, infidel objections to the Scripture account of the origin of the human race, and to vindicate the doctrine of revelation on this important subject. We have occasionally paid some attention to this point, and have read a little on the subject. But we are free to declare that we know of no work which, in so brief a space, and in such lucid terms, and by such solid reasoning, contains an equally full and satisfactory discussion of the question. The historical and doctrinal evidence of Scripture is clearly stated and ably illustrated—the former civilization of the black races of men is satisfactorily shown—the origin of the varieties of the human species is traced—and the unity of the race is demonstrated by various forcible and conclusive arguments. The argument is cumulative, and when the different sources of proof are properly weighed, and brought together, the result to any candid mind, who is capable of understanding the question, must be a very decided conviction of the truth of Scripture testimony on this subject. Dr Smyth states clearly and ably refutes the objections which have been advanced by late writers to the unity of the human races, and in the Appendix he furnishes satisfactory information respecting the scriptural knowledge of Africa, the adaptation of Christianity to the negro race, and other collateral topics. The work indicates very extensive reading and research, is replete with valuable information, and furnishes an able and unanswerable reply to the dogmatic assertions and crude theories of some modern infidels who, from observable varieties in the human races, have aimed to overturn the Scripture testimony to the descent of all human beings from one original pair, and thus to impede all efforts for the moral improvement and evangelization of mankind. We regard this volume as a valuable contribution to the evidence for the plenary inspiration and supreme authority of the Word of God ; and we rejoice that so learned and able a writer as Dr Smyth has grappled so successfully with the bold statements and sophistical reasonings of men, proud in their own conceits, who have been assiduously labouring to undermine the foundations of our most holy faith. It gives us pleasure to learn that a British edition of this work is in

course of publication. We trust the esteemed author will be long spared to reap the fruit of his diversified and arduous labours—and still farther to serve his generation, by the will of God, through the productions of his matured study.

From the London Evangelical Magazine.

Of the works published of late on this subject, that now introduced to the notice of the reader is the most thorough and complete.

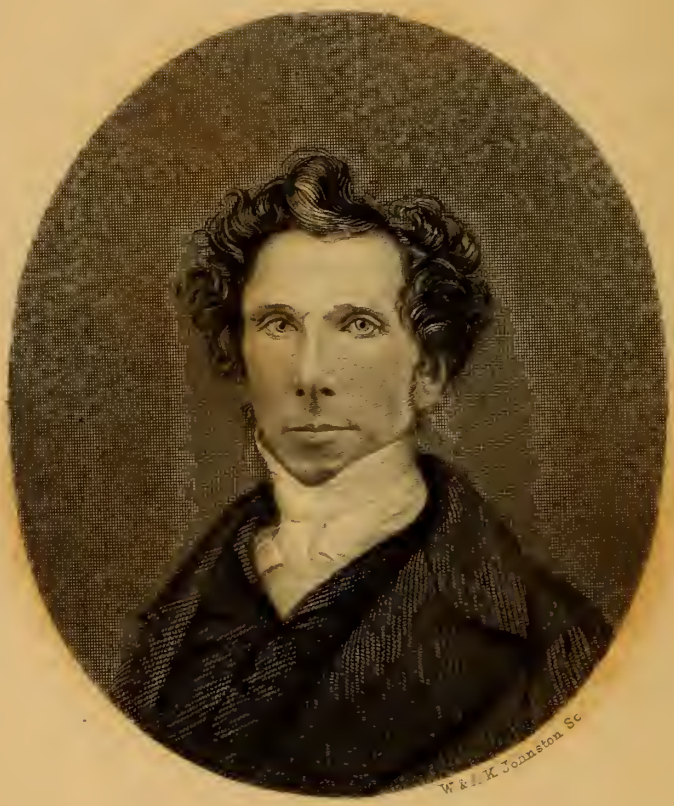
Dr Smyth here presents the mature fruits of a long and laborious inquiry. The work, in point of research and reference, reminds us of the productions of days long gone by, when our learned fathers, in the seclusion of their study, spared no time and toil in the preparation of their immortal tomes. Upon few books of the same bulk, we should think, has there been attention bestowed by their authors, at all equal to that which the valuable work before us exhibits. We should gladly devote some space to an examination of the contents, but we reserve for ourselves this pleasure till the work is republished in England, which it will be shortly. We should cordially recommend its perusal to all on this side the Atlantic who take an interest in the important subject. In the mean time, we cannot but present our congratulations to Dr Smyth, already so well known in America, and to some extent in England, by his works on Apostolical Succession, and Presbyterianism, on the large accession to his literary fame which he will assuredly derive from this very admirable volume.

From the British Quarterly Review.

Dr Smyth is a laborious and intelligent writer. The present subject has occupied his thoughts for some years, and the volume before us is the result. The plan of the treatise might have been more scientific ; but its accumulations of material, with the judicious estimate formed of the testimony borne to the general issue by so many different lines of fact, entitle the work to no common measure of attention from all persons interested in the inquiry to which it relates, and especially from all thoughtful men concerned to vindicate the authority of the sacred writers.

From the English Presbyterian Messenger.

This volume shows to what good account a clear head and powerful memory may turn the treasures of a splendid library. Not that Dr Smyth is a man of mere learning ; but the skilful use of his vast information has not only given force to his argument, but a very instructive and amusing character to many chapters of his book. The recent views of Professor Agassiz appear to have excited more attention in the Southern States of the Union than they have yet awakened in Europe ; and it is a cause of rejoicing that one so well equipped for the controversy has entered the field. We are glad to find that Dr Smyth has consented to prepare for the press an English edition.



Yours in the Lord
Thomas Smyth

JOHNSTONE & HUNTER

THE UNITY OF THE HUMAN RACES

PROVED TO BE

THE DOCTRINE OF SCRIPTURE, REASON, AND SCIENCE:

WITH

A REVIEW OF THE PRESENT POSITION AND THEORY OF PROFESSOR AGASSIZ.

BY

THOMAS SMYTH, D.D.,

MEMBER OF THE BRITISH AND AMERICAN ASSOCIATIONS FOR THE ADVANCEMENT OF SCIENCE.

FROM THE AMERICAN EDITION, REVISED AND ENLARGED BY THE AUTHOR.

"Ανθρωπω ηδιστον ανθρωπος."—ARISTOTLE.

"Man is surely of all things in the creation most interesting to man."

EDINBURGH:
JOHNSTONE AND HUNTER.

M.DCCC.LI.

THE POINT OF VIEW FROM WHICH WE DESIRE TO EXAMINE THIS IMPORTANT SUBJECT, IS THAT OF ENTIRE CONFIDENCE IN THE REVELATIONS OF GOD, BOTH IN HIS WORD AND WORKS: THERE ARE RELIGIOUS MEN WHO WOULD ADHERE TO THIS FORMULA IN TERMS, BUT PRACTICALLY LOOK UPON THE SCIENCE WITH SUSPICION AND HOSTILITY; AND THERE ARE NATURALISTS EQUALLY READY TO SAY SCRIPTURE AND NATURAL PHENOMENA CANNOT CONTRADICT EACH OTHER, BUT IT IS ONLY IN ORDER TO BOW SCRIPTURE RESPECTFULLY OUT OF THE WAY.

CONTENTS.

Page

Preface vii

Preface to the English Edition ix

CHAPTER I.

On the Nature and Importance of the Doctrine of the Unity of the Human Races. Part First—Anthropology . . . 1

NOTES to Chapter i. 24

CHAPTER II.

On the Nature and Importance of the Doctrine of the Unity of the Human Races. Part Second—Ethnology . . . 31

CHAPTER III.

Presumptive Arguments in favour of the Unity of the Human Races 55

CHAPTER IV.

The Historical and Doctrinal Evidence of Scripture . . 68

CHAPTER V.

The Historical and Doctrinal Evidence of Scripture—*continued* 89

CHAPTER VI.

The Historical and Doctrinal Evidence of Scripture—*concluded* 102

NOTE.—Scriptural Knowledge of Africa . . . 113

CHAPTER VII.

The Unity of the Races proved from the Religious Character of all Men, the Adaptation of Christianity to all Men, and the Truth of the Mosaic Records 118

NOTE.—Adaptation of Christianity to the Negroes . 128

CHAPTER VIII.

Page
The Twofold Character of the Question—Scientific Argument 133
NOTE.—The Cretins 136

CHAPTER IX.

The Nature and Philosophy of Species . . . 141

CHAPTER X.

The Unity of the Races proved by the Unity of the Species . 152

CHAPTER XI.

Latest Views of Professor Agassiz, and his Theory Tested . 165
NOTE.—Hugh Miller, Esq., on the Analogical Argument, and Review of Dr Barratt's Address 184

CHAPTER XII.

The Unity of the Races proved from their Fertility and the Infertility of Hybrids 189

CHAPTER XIII.

The Unity of the Races proved from the Universality, Nature, and Connection of Languages 199

CHAPTER XIV.

The Unity of the Races proved from the Universality, Nature, and Connection of Languages—*concluded* 208
NOTE.—America: its Languages and Tribes . . 220

CHAPTER XV.

The Unity of the Races sustained by the Testimony of History and Tradition 225
NOTE.—Civilization the First Condition of Man . . 239

CHAPTER XVI.

The Unity of the Races proved from Experience, from known Changes which have occurred among the different Races of Men, and from the Characteristics of the African Races . . . 242
NOTES.—The Skull of the Negro, and the Veddahs of Ceylon 266

CHAPTER XVII.

Page

The Unity of the Human Races proved from the Insensible Gradations of their Varieties, and from their Analogy to what takes place in other Animals 278

CHAPTER XVIII.

Origin of the Varieties of the Human Species . . . 288

NOTES.—The Power of External Causes to Modify Species, and Views of Hippocrates 314

CHAPTER XIX.

Origin of the Varieties of the Human Species—*concluded* . 316

CHAPTER XX.

Resumé of the Arguments for the Unity of the Human Races, and Objections considered 324

CHAPTER XXI.

The Theory of a Plurality of Origin in the Races of Men, Unphilosophical 330

CHAPTER XXII.

The Theory of a Plurality in the Races of Men, Uncharitable . 345

APPENDIX.

On the Former Civilization of the Black Races of Men . . 353

NOTE.—Black Representations of Christ and the Virgin . 374

On the Power of External Causes to Modify Species . . . 376

Index 405

Scriptural Index 407

PREFACE.

The subject discussed in this volume has formed the topic of anxious consideration with me for many years. In 1846, during a visit of Professor Agassiz, this question was discussed by him in the Literary Conversation Club of Charleston, South Carolina, when I was led to controvert his positions and to the formation of the plan of this volume. The interest awakened by the publication of the Lectures of Dr Nott of Mobile on the "Biblical and Physical History of Man" in the further examination of this question, and especially in its relations to the Bible, induced me to prepare three discourses on the Unity of the Human Races, which were delivered in Charleston, in November 1849. At the same time the publication of a series of articles upon the subject was commenced in the Southern Christian Advocate, the Southern Baptist, the Southern Presbyterian, the New Orleans Presbyterian, the Presbyterian of the West, and in the Watchman and Observer of Virginia. These articles, modified, elaborated, and now rearranged and enlarged, constitute the present volume. They were written amid the numerous occupations of a pastoral charge, and the growing infirmities of feeble health. They will, therefore, call for much allowance, both as to style and arrangement. Since writing out the argument, it has been strengthened by several illustrations drawn from the recent scientific examination of the same subject in an elaborate Essay by the Rev. Dr Bachman of Charleston, the learned author of the Quadrupeds of America, and joint author and editor of

Audubon's Birds of America, and from some articles in our leading Reviews.

My object has been to take a comprehensive survey of the whole subject in its relations to Scripture, Reason, and Science. The argument is cumulative, and the conclusion, therefore, depends not on any one line of reasoning, but upon the combined effect of all. Some are in themselves incomplete, and others only presumptive, but on the doctrine of probability it may appear that the concurrence of so many distinct lines of proof in establishing the original unity of the human races, is equal to the clearest demonstration.

There is certainly, as has been said, no subject of science of deeper interest than that which regards the natural history and original condition of man. Even were the question it involves less remarkable and less important in regard to the present and future condition of the species, the methods of argument and sources of evidence are such as may well engage and engross every scientific inquirer. The evidence is drawn from all parts of creation—from the mind, as well as from the bodily conformation of man himself. The argument is one of probability, always tending to greater certainty, though it may be incapable of ever reaching that which is complete. But this is a method of reasoning well understood to be compatible with the highest philosophy, and peculiarly consonant to our present faculties and position in the universe; and in this ocean of disquisition "fogs have been often mistaken for land," as in so many other regions of science, we may at least affirm, that the charts are more correctly laid down than ever before; the bearings better ascertained; and that our reason can hardly be shipwrecked, on this great argument, if common caution be observed in the course we pursue.

PREFACE TO THE ENGLISH EDITION.

In preparing this work for an edition in this country, at the urgency of many valued friends, the author has endeavoured, as far as his state of health would allow of application, to avail himself of all the suggestions which has occurred to his own mind, or which have been kindly furnished by others, and especially by the Rev. Alexander Duff, D.D., to whom he would express his great obligations. He would also tender his thanks to G. R. Latham, Esq., for an early copy of his most valuable work on the Varieties of Mankind, from which many valuable facts confirmatory of his views have been inserted.

The whole work has been rearranged, with the addition of two new chapters at the beginning of the volume, and several valuable additions, especially the very interesting account of the Veddhas of Ceylon, which, by the great personal kindness of the author, Sir James Emerson Tennent, he is permitted to extract from the manuscript of his yet unpublished volume on the Social and Christian history of that country.

A few pages of matter irrelevant to the general question discussed, have been omitted, and the Inquiry into the Former Civilization of Black Races, has been thrown into an Appendix, in order that differences of opinion on that subject may not affect the reader's judgment of the direct arguments of the work.

And that the book may not appear to force itself rudely upon the notice of the British public, some Introductory Letters from eminent men who have examined it, are prefixed.

THE AUTHOR.

EDINBURGH, *September* 1851.

WORKS BY THE SAME AUTHOR.

1. Apostolical Succession. 8vo. Boston. 1842. Pp. 600.
*2. Presbytery and not Prelacy the Scriptural and Primitive Polity of the Churches. 8vo. Boston. 1843.
3. Ecclesiastical Republicanism. 12mo. Boston.
*4. Ecclesiastical Catechism. 18mo. 5th ed. Boston.
*5. Claims of the Free Church of Scotland. 18mo. New York.
6. Life and Character of Thomas Chalmers, D.D., LL.D., with Personal Recollections. A Discourse. 8vo.
7. Nature and Functions of Ruling Elders. 12mo. New York.
8. Nature and Functions of Deacons. 8vo.
*9. The Rite of Confirmation Examined, &c. 18mo. New York.
10. Bereaved Parents Consoled. 12mo. New York.
*11. Union to Christ and His Church. 18mo. Edinburgh. 1844.
12. The True Origin and Source of the Mecklenburgh Declaration of Independence, with a continuation on Presbyterianism, the National Declaration, and the Revolution. 8vo.
13. Denominational Education. 8vo.
14. Pastoral Memento. 18mo. New York. 1850.
15. Life and Character of Calvin. 18mo.
16. The Westminster Assembly. 12mo, &c.
17. The Nature of Assurance, the Witness of the Spirit, and the Call to the Ministry. 8vo.
18. Capital Punishment. 8vo.
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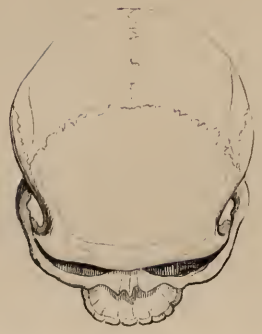
23. On Parochial Schools. 8vo.
24. The Virgin Mary not a Perpetual Virgin, nor the Mother of God. 8vo.
25. The Duty of Interesting Children in the Missionary Enterprise. 8vo.

* These works have also been published in Great Britain.

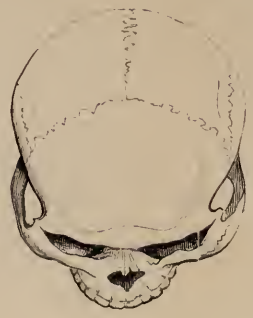
WORKS BY THE SAME AUTHOR.

26. The Destined Efficiency of Juvenile Missionary Effort. 8vo.
27. The Prospects of the Heathen for Eternity. 12mo.
28. Collections for Charitable and Religious Purposes a part of the Divine Service, and a Means of Grace. 12mo.
29. The Fundamental Doctrines of the Gospel the only Basis of Christian Charity and Union.

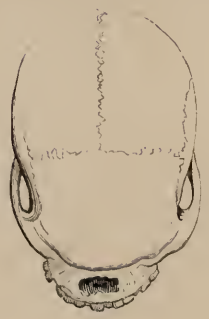
The comparative length and breadth, the degree of prominence in the face, and that, also, of the malar bones and zygomatic arches, in different races.



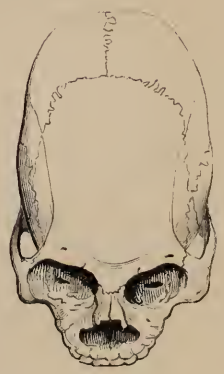
Caucasian.



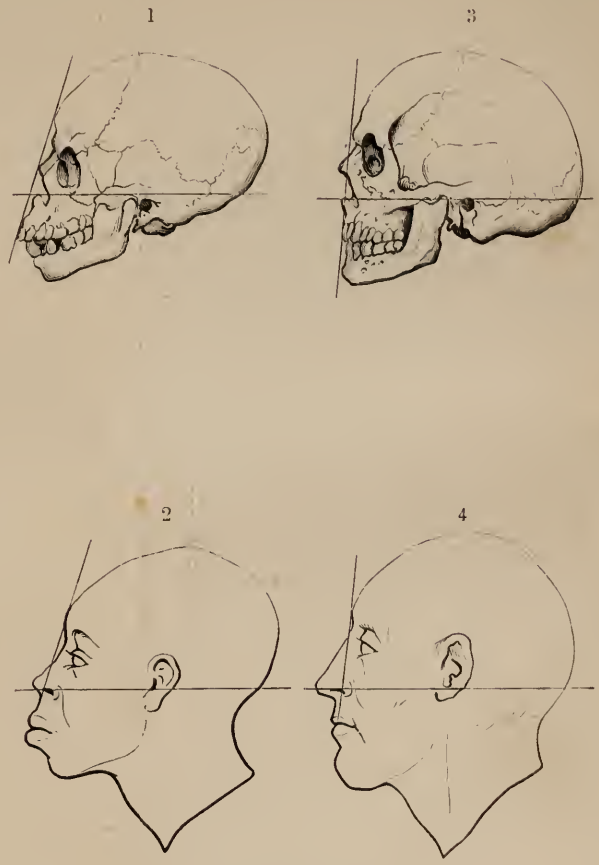
Mongole.



Negro.



Titicacan.



FROM CAMPER.

1 and 2.—The skull and facial outline of a young Negro.
3 and 4.—The skull and facial outline of an ordinary European.

CHAPTER I.

ON THE NATURE AND IMPORTANCE OF THE DOCTRINE OF THE UNITY OF THE HUMAN RACES.

PART FIRST—ANTHROPOLOGY.

Philosophiâ ineptâ res ineptior nulla est.

Quid tum si fuscus Amyntas?
Et nigræ violæ, sunt et vaccinia nigra.

Man, in the most degraded condition of savage life, stands alone; and is still a being of "large discourse, looking before and behind."

MAN, considered as possessed of a physical organization, is an animal; and comes under the scientific analysis and arrangements of zoology. The example of Aristotle, who excluded man from the pale of the animal kingdom, has not wanted followers in the present age. Brisson, Pennant, Vic d'Azyr, Daubenton, Tiedemann, and Swainson, have protested, more or less strongly, against his introduction into an arrangement of the brute mammalia. Mr Swainson, after urging the "innate repugnance, disgust, and abhorrence in every human being—ignorant or enlightened, savage or civilized—against the admission" of any relationship between man and the lower orders of mammalia, proceeds to say, "Now, the very first law, by which to be guided in arrangement, is this, that the object is to be designated and classified by that property or quality which is its most distinctive or peculiar characteristic. This law, indeed, is well understood; and has

only been violated by systematists, when they designate man as an animal. Instead of classing him according to his highest and most distinguishing property—Reason, they have selected his very lowest qualities whereby to decide upon the station he holds in the scale of creation. Because, as an infant, he has suckled at the breast of his mother, he is to enter into the class of animals called mammalia; and, because he has nails upon his fingers and toes, he is to be placed among the unquiculated animals; and, because some of the apes have an hyoid bone (os hyoides—a bone common to all mammalia, though differently modified in each group), man is to be classed with them in the same group! What are all these but secondary characters, totally unfit to designate his true peculiarities?"*

Mr Ogilby, on the other hand, observes, that the order ERECTA of Illiger is "founded upon metaphysical, rather than physiological considerations; and destroys at once both the harmony and simplicity of his arrangement. The pride of intellectual superiority and moral endowments has, indeed, frequently induced naturalists to consider man as forming a distinct and separate order by himself, and to fancy that it would be degrading the lord of creation to associate him in the same group with the apes and the monkeys (and also the lemurs and opossums); but such scientific weakness cannot destroy the numerous affinities which actually characterize the structure of these animals as compared with our own, or blind the unprejudiced observer to the obvious relations which subsist between the bimana and the quadrumana. The metaphysician and the divine may, without impropriety, consider man apart from the rest of the animal kingdom, and in relation only to his intellectual and moral nature; but the naturalist must view him in a different light. Anatomical structure and organic conformation are the only principles which the zoologist can admit as the foundations of natural science; and, in this respect, man is too closely connected

* Swainson on the "Natural History and Class of Quadrupeds," pp. 8–10.

with the apes, and other simiæ, to admit of being placed so widely apart from them as he has been in some recent classifications of mammals."*

If, however, as Mr Martin well remarks, the end of organization be to provide instruments capable of duly administering to the instincts, or the intelligence, or the necessities of animals, then must the organization of man—which accords with the unique situation in which he is placed in the great plan of creation, with his intellectual superiority and moral endowments (according to the "law of harmony")—elevate him, physiologically considered, no less than metaphysically.

But, granting this, it is undoubtedly true that it is upon the physical organization of living bodies, setting aside instinctive or rational qualities, that the laws of arrangement are founded. And if this principle be kept in view as the *sole* end of the classifications of zoology, and such divisions are regarded as having exclusive reference to mere physical organization, and not to the whole nature and the entire properties of being, then they are not only not objectionable, but highly conducive to the simplification and advancement of science.

Looking at him in this light, then, man, having a vertebral structure, is arranged under the general DIVISION of the VERTEBRATA, as distinguished from the MOLLUSCA, the ARTICULATA, and the RADIATA. Being nourished by the food provided by the maternal breasts, or mammæ, man is ranked under the more limited CLASS of MAMMALIA. Having two hands, in contradistinction to all other mammalia, he is again placed under the separate ORDER of BIMANA. And, as all men have at least many general resemblances, by which they are at once assimilated to each other, and distinguished from all other mammalia, all men are classed under the still more limited and characteristic division of GENUS HOMO—a term derived from the Greek word γενος, which signifies origin or lineage.

Thus far there is no difficulty and no variance of opinion

* See "Observations on the Opposable Power of the Thumb in various Mammals. By W. Ogilby, Esq."—Proceedings, Zool. Soc., L., 1836, p. 28.

respecting the zoological classification of the human family, except among the followers of Maillet and Lamarck.* "These philosophers maintained that there is no impassable line between species, or even genera, families, and classes; and so held that all animals—the human race as certainly as the others—may have commenced in the lowest forms, and developed during the course of ages to what they now are." This form of error, after ineffectually struggling for a fresh existence, through the skilful assistance of that very credulous midwife, the author of the "Vestiges of Creation," has again come into the world still-born, and been consigned—perhaps with a very unnecessary pomp of learned reputation—to an untimely grave. "Nor will this theory be very efficiently revived until some new accumulation of fact gleaned from the yet unexplored portions of the geologic field, or the obscurer fields of natural history, and pregnant with those analogical resemblances between the course of creation and the progress of embryology with which nature is full, will give it new footing, by associating it with novel and interesting facts." †

Geology, however, as well as reason, observation, and experience, gives incontestable proof of the original, permanent, and untransferable characteristics of all the divisions, orders, and genera into which animals have been naturally and necessarily divided from the very beginning of their creation until

* Lamarck says, "I have no doubt that all the mammalia have originally sprung from the ocean; and the latter is the true cradle of the whole animal kingdom. In fact, we see that the least perfect animals are not only the most numerous, but that they either live solely in the water, or in those very moist places where nature has performed, and continues to perform, under favourable circumstances, her direct or spontaneous generations; and there, in the first place, she gives rise to the most simple animalcules, from which have proceeded all the animal creation."—(See Philos. Zool., tome ii.)

† Hugh Miller, in review of this work.

See Monck's Reply to the Vestiges of Creation; the Footprints of the Creator, by Hugh Miller; the Principles of Zoology, by Professor Agassiz, &c. See also Agassiz on the Succession of Organized Beings, in the New Edinburgh Philosophical Journal, for April 1850, p. 162; and, also, Professor Sedgwick's Discourse on University Education, fifth edition. Preliminary Dissertation and Supplement to the Appendix.

now; and the thorough investigations of modern science establish the most complete and absolute separation, both as it regards ORDER and GENUS, between man and all other animals. Of these, the nearest approximation to the human form is found in the monkey tribe, and especially in the ourang outang, the engé-ena, and the chimpanzee tribes, or, as Mr Martin classifies them, the Troglodytes, the pythicus, and the hylobates.* If, therefore, it can be shown that there are generic and immutable distinctions, by which, with all their *analogous* resemblances, man is separated from, and elevated above, the quadrumanous animals, it will be still more obvious that there is no relationship or affinity between man and other mammalia.

This inquiry constitutes ANTHROPOLOGY, in distinction from ETHNOLOGY.

"The natural history of man," says Mr Latham,† "is chiefly divided between two subjects—ANTHROPOLOGY and ETHNOLOGY. ANTHROPOLOGY determines the relations of man to the other mammalia; ETHNOLOGY, the relations of the different varieties of mankind to each other. Anthropology is more immediately connected with zoology, differing from it chiefly in the complexity of its problems, *e.g.* the appreciation of the extent to which the moral characteristics of man complicate a classification which, in the lower animals, is, to a great extent, founded on physical criteria."

As, therefore, the essential unity of all the human races depends for one of its strongest proofs upon the essential difference of all these races from every other class of animals, we shall devote some space to this argument.

As animals of a high order of conformation and endowments, there are undoubtedly points of similarity between monkeys and men. "This is exemplified, however, less in the shape of the teeth, except that the molars are bluntly tuberculate, than in the condition of the lungs and liver—the position

* Natural History of Mammiferous Animals, p. 361, &c.

† Natural History of the Varieties of Man, pp. 559, 560.

and appearance of the intestinal canal—the attachment of the vermiform appendix to the cœcum—the structure of the stomach, which, however, is thicker and narrower at the pylorus —and in the disposition of the arteries, arising from the arch of the aorta. But with every abatement, and exalting them to the head of the simiadæ, the most remarkable external characters in which they agree consist in the absence of a tail and of cheek-pouches, and in the extraordinary length of the anterior extremities compared with the posterior." *

Naturalists, therefore, to use the words of Mr Martin, have regarded man as the example of an order *per se*, having characters by which it is distinguished from every other into which the mammal class is divided. Among these are Illiger and Cuvier. Illiger, in his "Prodromus Systematis Mammalium," has taken the name of this order from the attitude of the human race, and entitled it erecta. Cuvier, from one of the structural peculiarities of the race—viz. the possession of two true hands—has termed it bimana—a title which most naturalists, both Continental and British, have adopted. The essential characters of man, considered as the order bimana, may be stated as follow:—

Attitude erect—the body being supported on the lower limbs only, which are developed according to the weight to be sustained, and the mode in which that weight is to be supported; feet plantigrade, pentadactyle (five-toed), non-prehensile.

Superior extremities free, claviculated, and terminating in true hands, being organs of touch and of prehension, and having the thumb so developed as to antagonize with the tip of each finger separately, or with the whole together. The head supported by, and nearly balanced upon, the spine; the cranial portion greatly developed in proportion to the face; the lower jaw short, and its symphysis modelled into a true chin. The teeth of equal length, and approximating together, without intervals:

* See Martin's Natural History of Mammiferous Animals, especially Monkeys, p. 361, &c.

incisors, $\frac{4}{4}$; canines, short, $\frac{1-1}{1-1}$ bicuspid molars, $\frac{2-2}{2-2}$; true molars, bluntly quadricuspid, $\frac{3-3}{3-3}$; = 32. The cerebral hemispheres of the brain greatly preponderating; the mass of the brain being voluminous, in proportion to the nerves communicating with it. Growth slow; infancy long; maturity acquired at a comparatively late period. Skin smooth; natural weapons, offensive or defensive, denied by nature.

Mammæ two, pectoral. Os coccygis abbreviated and incurved. Species—Homo sapiens, Linn.

Dr Lawrence enumerates man's generic differences from all other animals as follows:—

1. Smoothness of skin, and want of natural offensive weapons, or means of defence.

2. Erect stature, to which the conformation of the body in general, and that of the pelvis, lower limbs, and their muscles in particular, are accommodated.

3. Incurvation of the sacrum and os coccygis, and consequent direction of the vagina and urethra forwards.

4. Articulation of the head with the spinal column by the middle of its basis, and want of ligamentum nuchæ.

5. Possession of two hands, and very perfect structure of the hands.

6. Great proportion of the cranium (cerebral cavity) to the face, receptacles of the senses, and organs of mastication.

7. Shortness of the lower jaw, and prominence of its mental portion.

8. Want of intermaxillary bone.

9. Teeth all of equal length and approximated, inferior incisors perpendicular.

10. Great development of the cerebral hemispheres.

11. Greatness of brain in proportion to size of the nerves connected with it.

12. Great number and development of mental faculties, whether intellectual or moral.

13. Speech.

14. Capability of inhabiting all climates and situations; and of living on all kinds of food.

15. Slow growth, long infancy, late puberty.

16. By very great peculiarities connected with the functions, times, and seasons of procreation.

These peculiar characteristics of man are so numerous and strong, as to have led all naturalists, with very few exceptions, to arrange a separate order or genus for himself. The same rules by which the characteristics of distinct and separate species and genus are determined, as it regards other animals, when applied to man, in view of his physical and other qualities, have led naturalists to the unhesitating conclusion, that he is at a much greater distance from all other animals than they are from one another, and that he must therefore be regarded as a distinct genus, which contains under it no species, but only permanent varieties.

In all that man possesses in common with the brutes, he is characterized by superiority, and exhibits a marvellous adaptation to all the higher and varied functions and occupations to which he, and he alone, is destined. Physiologically and anatomically, therefore, in the complicated nature of his organization, in his structure, in his organs, in the multiplicity of his relations to the external world, in the great variety of his functions, in his nervous system, in his development, in his limitations to territory, habits, food, and employment—man is pre-eminent.

"In man," says Dr Roget, "in whom all the faculties of sense and intellect are so harmoniously combined, the brain is not only the largest in its size, but, beyond all comparison, the most complicated in its structure. All the parts met with in the brains of animals exist also in the brain of man; while several of those found in man are either extremely small or altogether absent in the brains of the lower animals. Sœmmerring has enumerated no less than fifteen material anatomical differences between the human brain and that of the ape."

"The importance," says Mr Martin, from whom we again

largely quote, "to be attached to the zoological characters afforded by the slighter modifications of structure, rises as we ascend in the scale of being. In the arrangement of mammalia and birds, for example, minutiæ which, among the Inocclibiata, would be deemed of little note, become of decided value, and are no longer to be neglected. Even the modifications, however slight, of a common type, now become stamped with a value, the ratio of which increases as we advance from the lower to the higher orders. Hence, with respect to mammalia, the highest class of vertebrata, every structural phase claims attention; and when we advance to the highest of the highest class, viz., man, and the quadrumana, the naturalist lays a greater stress on minute grades and modifications of form, than he does when among the cetacea or the marsupials; and hence groups are separated upon characters thus derived, because they involve marked differences in the animal economy, and because it is felt that a modification, in itself of no great extent, leads to most important results. Carrying out the principle of an increase in the value of differential characters as we advance in the scale of being, it may be affirmed that, upon legitimate zoological grounds, the organic conformation of man, modelled, possibly, upon the same type as that of the chimpanzee or ourang, but modified with a view to fit him for habits, manners, and, indeed, a totality of active existence, indicative of a destiny and purposes participated in neither by the chimpanzee nor any other animal, removes man from the quadrumana, not *merely in a generic point of view*, but from the pale of the primates, to an exclusive situation. The zoological value of characters derived from structural modifications, is commensurate with the results which they involve. Let it then be shown that man, though a cheiropoda (hand-footed), possesses structural modifications leading to most important results, and our views are at once justified. If, therefore, the class mammalia be divided into sub-classes, or subordinate sections, each section including orders, then there is no objection to the application of the

term cheiropoda, primates, or any other, to a section including the orders bimana and quadrumana (except that it renders an arrangement needlessly complicated), as terms, in themselves, are of little importance. It is not against these that the argument is directed; but against the establishment of the primates as an order including the genera man, monkey, and bat; and, consequently, also, against the inclusion in the order cheiropoda of bimana (man), quadrumana (the old-world monkeys and lemurs), and pedimana (the American monkeys and the opossums), as coequal families. It may be answered, that the term order, as applied to cheiropoda, has a much wider—a more comprehensive signification than is allowed it by Illiger or Cuvier, and that its subordinate groups are of the same value as Cuvier's orders. But, if so, the use of the term, in any other sense than that attributed to it by the standard authorities, can scarcely be justified.

"Without dwelling on these points, however, it remains to explain the differential characters of man, with a view to prove that the modifications of his structure involve consequences which draw as wide a line, zoologically considered, between him and the quadrumana, as between the quadrumana and the carnivora. It is scarcely necessary to say, that, to man alone, of all animals, is the erect attitude easy and natural—that the magnitude and position of the cranium, the structure of the spiral column, the osseous and muscular development of the pelvis and lower extremities, necessitate such an attitude.* One advantage gained by this arrangement is the freedom of the superior extremities, the lower limbs being the sole organs of progression. In the ourang and chimpanzee, all four extremities are organs of locomotion. The chimpanzee, it is true, can proceed on the ground supported, or rather balanced, on the lower extremities, calling the superior only occasionally into use, except in as far as they are needed to maintain the equilibrium of the body. But man walks with a free and

* See full on this point in Dr Hall's Introductory Essay to Pickering on the Races, and Martin, pp. 25, 28, 29, 30, 69, and 97.

vigorous step, very unlike the vacillation of the tottering chimpanzee, and with his arms at liberty for action in any way that may be required.

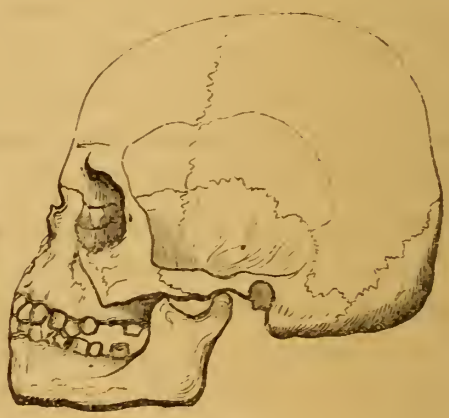
"It is usual to designate the graspers, which terminate the anterior limbs of the simiæ, as hands. If, by the term hands, it is implied that they are equivalent to the hands of man, then their claim to the appellation must be denied. Mr Ogilby observes, that the extremities of the quadrumana, 'instead of being mere organs of locomotion, execute the still more important functions of prehension and manipulation.' It is admitted that the anterior hands of the simiæ are capable of grasping, but not in the same way as the hands of man; for in none of the simiæ is the thumb of the anterior hand fairly opposable to the fingers. Besides, the ape has these graspers not only terminating the anterior extremities, but the posterior also; and, indeed, the latter approach nearer the human hand, as far as the development of the thumb is concerned, than the anterior. Here, again, an important difference, involving signal consequences, exists between man and the quadrumana. While the posterior extremities of the quadrumana are more powerfully prehensile, and have the thumb better developed than it is on the anterior, the feet of man are not prehensile, and the whole form of the foot militates against the possession of a prehensile power. The short toes, all on the same plane—the solidity of the instep—and the firmness of the ancle-joint, are decided characteristics. Among barbarous nations, the toes may, indeed, have more freedom than among civilized people, and may be capable of hooking round small objects; but, with every allowance, the human foot is not a prehensile organ, like the posterior graspers of the monkey; and a greater difference exists between the human foot and the analagous organ of the simiæ, than between the latter and the hind foot of any unquiculate animal, as the squirrel or the dormouse.

"After all, it is upon modifications of one great type of structure that all the orders among the mammalia are founded;

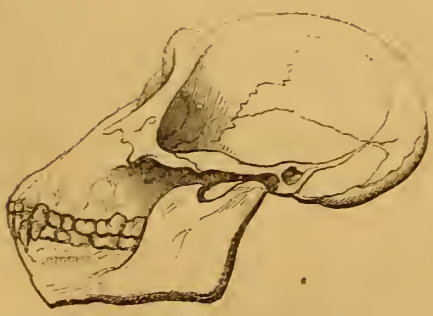
and the characters of the hands and of the feet of man—regard being had to the consequences involved by their modifications, and to the increase of value attached to even the slighter variations of structure, as we ascend the scale—are, of themselves, sufficient to establish man's distinctive situation, as the representative of an order: for man is the only true biped among terrestrial mammalia.

"Let other structural peculiarities of the human frame be now compared with those of the nearest anthropomorphous simiæ. Comparative views of the skulls of the European and the negro (figs. 1, 2), on the one hand, and of the chimpanzee and ourang (figs. 3, 4), on the other, are here presented, in

No. 1.—European.



No. 2.—Negro.



No. 3.—Chimpanzee.

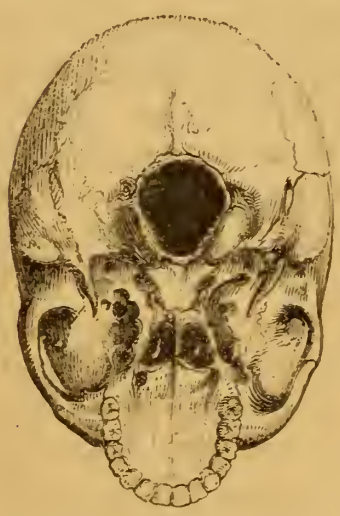
No. 4.—Ourang.

order that their respective proportions may be the more easily appreciated, and to show that the differences between the cranium of man and of these simiæ are not limited merely to the development of the forehead, the ratio between the face and the cranial cavity, the hiatus between the upper canines and the incisors, the oblique position of the incisors, the length of the canines (though circumstances of great importance), but extend, also, to a variety of other points of structure.

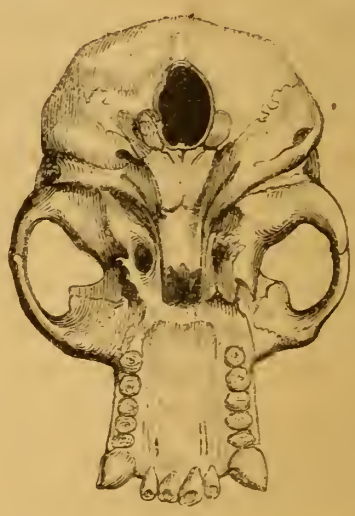
"It has been reiterated, that the skull of the negro forms an intermediate link between that of the European and of the ourang or chimpanzee; and one point of approximation between the former and the latter is said to consist in the situation of the foramen magnum. Now, in the skull of a negro (fig. 2), this foramen differs in position but very little from that of the well-formed skull of a native of England (fig. 1); while the posterior situation of the foramen, both in the skull of the chimpanzee and the ourang, is very remarkable. Again, the distance from this foramen to the incisor teeth (which is so considerable in the anthropomorphous simiæ), compared with its distance from the occiput, is nearly the same in the negro as in the European; and, as Dr Prichard remarks, the antero-posterior admeasurement of the basis of the skull is, relatively, very much larger in the ourang and chimpanzee than in man, as is strikingly displayed by the different situation which the zygomatic arch occupies in the plane of the basis of the skull. In man, the zygoma is included in the anterior half of the basis of the cranium; in the head of the adult chimpanzee, as well as in that of the ourang, the zygoma is situated in the middle region of the skull, and, in the basis, occupies just one third part of the entire length of its diameter. The extent, besides, of the bony palate, and the greater breadth between the canines than between the last molars, both in the chimpanzee and ourang, so as to allow of the spreading and want of continuity of the incisors, with respect to each other and to the canines, widely distinguish between the skulls of these animals and those of any of the human race. Both in the

negro and European, the base of the skull, around the foramen magnum, is boldly convex, according to the development of the cerebrum; whilst, in the simiæ, the base of the skull is flat, which form is indicative of a curtailment of the volume of the brain beneath, in accordance with that of the cerebral hemispheres at their upper and anterior aspect.

"The cancellous mastoid processes, which are so large in the human skull, are scarcely to be discovered in the skulls of the simiæ. These processes are represented in the chimpanzee by a ridge behind each auditory foramen, the internal cellular structure of which, as Professor Owen observes, is visible through the thin external table. The styloid process of the temporal bone, also, is entirely wanting in the simiæ. It exists in the negro, as well as in the European. These important differences may readily be distinguished in the figures 5 and 6, which represent the base of the human skull and of the ourang.



No. 5.—Base of Human skull.



No. 6.—Base of skull of Ourang.

"It has been observed by Professor Owen, that in some skulls of negroes, and in one of an Australian savage, he found the sphenoid bone not impinging on the parietal at its lower

anterior angle, as it does in the skulls of Europeans; and that, in this respect, they agreed with the skull of the chimpanzee, but not of the ourang. This trifling variation does not affect either the form or volume of the cranium; and, besides, it is not a constant character in the negro, nor even in the chimpanzee.

"The great density of the negro's skull has been noticed by Paau, Sœmmerring, and other naturalists; but it is not peculiar to the negro race: in most savage nations the skull is thicker and harder than among civilized races. The ancient Egyptians also were remarkable for the density of the cranium. The thickness of the skull of the negro indicates neither intellectual inferiority nor structural approximation to the ourang or chimpanzee; in fact, though the crania of the various races of mankind may vary, as compared with each other, throughout an almost unlimited series of minor details, they preserve inviolate their great characteristics of distinction; no intermediate condition is discoverable among them, no half-human, half-simian form, indicative of the 'Homo ferus, tetrapus, mutus, et hirsutus'—the Caliban of science—the link which binds man to the arboreal quadrumana. It is obvious that skulls distorted by art from their natural form, cannot be taken into account; such, for example, as the skulls of the flat-headed Indians, and other tribes of America, which owe their unnatural configuration to long-continued pressure, commenced immediately after birth; or the skulls of an ancient Peruvian race, found in the sepulchres occurring in the great alpine valley of Titicaca; which, though Mr Pentland attributes their singular contour to nature, and not to art, have been, it cannot be doubted, subjected to the same treatment as is still continued among the Columbian tribes, and is also practised by the Caribs of St. Vincent's. However ape-like these distorted skulls may be (and the observation applies also to the deformed skulls of idiots), they are not to be regarded as indications of any natural approximation to the simiæ.

"A distinction between the skulls of all nations and those

of the simiæ, upon which much of the character of the human face depends, and which is not destitute of importance, may here be noticed; namely, the elevation, in man, of the nasal bones, which form the bridge of the nose; while, in the simiæ, the nasal bone (for it is single) lies flat and depressed.

"Sœmmerring, Camper, and Vrolik, have endeavoured to prove, that in the pelvis of the negro there is an approximation, in its form, to the lower mammalia; a degradation in type, imparted, as Dr Vrolik observes, 'by the vertical direction of the ossa ilii; the elevation of the ilii at the posterior and upper tuberosities; the greater proximity of the anterior and upper spines; the smaller breadth of the sacrum; the smaller extent of the haunches; the smaller distance from the upper edge of the articulation of the pelvis, and the projection of the sacrum, or the shortness of the conjugate diameter; the smallness of the transverse diameters at the spines and tuberosities of the ischium, and the lengthened form which the pelvis derives from these peculiarities.' All these characters, as he says, recall to mind the conformation of the pelvis in the simiæ, the elongated shape of the pelvis being, in fact, the character on which this approximation is assumed to depend. To judge by the skeleton of the female of the Bushman tribe, who died at Paris in 1815, the pelvis, according to Dr Vrolik, is inferior to that of the negro, as evidenced by the vertical direction, the length and narrowness of the ilii. According to the same writer, the pelvis of the Javanese is remarkable for its smallness, its lightness, and the circular form of the opening of its upper cavity. According to Professor Weber, the variations of the human pelvis resolve themselves into four forms; and he contends that examples of each occur in all races of mankind, no particular figure being the exclusive or permanent characteristic of any given race—in fact, that very form of the pelvis which deviates from the ordinary type, in whatever race it may occur, finds its analogues in other races of mankind. The four varieties of the pelvis, according to the extensive re-

searches of this anatomist, are the oval, the round, the square, and the oblong; and of each of these he gives European examples, as well as examples occurring among the Botocudo Indians, the Negroes, the Caffres, and the Javanese. Still, according to his researches, it would seem that the form most frequently occurring among Europeans is the oval; among the American nations, the round; among the Mongolians and kindred tribes, the square; and among the races of Africa, the oblong.

"Admitting, as is doubtless the case, that the pelvis, as well as the cranium, varies among different nations, yet, even in the form farthest removed from that of the European type, the genuine characters of the human pelvis are found; viz. those connected with the support of the trunk in the erect attitude, with the direction of the thigh bones, and with the volume of the glutæi muscles. In short, the pelvis of the human race, like the skull, is removed by a wide interval from that of the most anthropomorphous of the simiæ; and the simiæ, in the form of this part, are far nearer to the carnivora than they are to the human species.

"A comparison of the lower limbs among the various races of mankind, might be here followed out, for these also exhibit slight differential peculiarites; but it is useless to proceed farther. The question recurs—Is the naturalist, upon the acknowledged distinctions between man and the simiæ, justified in regarding the human being as the type of a distinct order? If man be the only being endowed with mind—the only being capable of examining his own formation, and that of other animals—the only being to whose intellect the paths of science are open—to whom alone it belongs to learn and practise arts, and, from an investigation of the laws of nature, to arrive at the knowledge of a great First Cause; if it be to his mind, and not to instinct, that he has to resort for the maintenanee of his own existence, his safety, and his civil advancement; and if his bodily organization comport with this possession of mind, and harmonize with it alone—so that between his mind and body there exist a mutual balance and

correspondence—then, though the ape may have an analogy to him in certain points of his structure, it can claim no real affinity. The anthropoid appearance of the chimpanzee may, indeed, startle us; and has led to the assignment to it of a far higher ratio of intelligence than it really possesses; but, it must be remembered that, from the chimpanzee to the stupid nocturnal loris, there is a consecutive chain of gradation; WHILST MAN IN THE MOST DEGRADED CONDITION OF SAVAGE LIFE, STANDS ALONE, AND IS STILL A BEING OF 'LARGE DISCOURSE, LOOKING BEFORE AND BEHIND.'

"One department of zoology is the right discrimination between the groups into which natural objects are resolvable (and which is rather to be accomplished by taking the totality of organization into account, than by pertinaciously looking at only one or two points of structure): yet, strange to say, one naturalist places man, the monkeys, and the bats together; and another, excluding the bats, considers man, the monkeys, and the cheiropodous marsupials, as constituting a natural order.

"It may be deemed that the system which would establish man as the type of an exclusive order, is the result of a sort of pride, repugnant to the fancied disgrace which the association of him with the simiæ and cheiropodous marsupials would seem to reflect upon our species. But such is not the case; for man can be neither raised by one system nor lowered by another. It is because the totality of his conformation, taking into account the increase in the value of characters as we ascend in the scale, appears to justify his exclusive situation, that it is assigned to him; while, on the contrary, to include man, the simiæ, and bats in one order, because man has hands and the simiæ have hands, or hand-like paws; or, because in the human species the mammæ are pectoral, as in bats and monkeys, seems to be an effort to distort analogies of structure into proofs of direct and positive affinity.

"Again, the opinion may be expressed that, according to the law of harmony—the condition of existence which ordains

the mutual accordance of organization with necessities, instinct, and intelligence—man, having a situation in the great scheme of nature unique as to mind, destiny, and the place in creation he has to fill, must have an organization in unison with his intellectual exaltation—his mental isolation; and which will furnish data sufficient, if duly weighed, to satisfy the physiologist as to the propriety of his being considered as the representative of an exclusive order." *

"Man," says Agassiz, "in virtue of his twofold constitution—the spiritual and the material—is qualified to comprehend nature. Having been made in the spiritual image of God, he is competent to rise to the conception of his plan and purpose in the works of creation." Again, he says, "Besides the distinctions to be derived from the varied structure of organs, there are others less subject to rigid analysis, but no less decisive, to be drawn from the immaterial principle with which every animal is endowed. It is this which determines the constancy of species from generation to generation, and which is the source of all the varied exhibitions of instinct and intelligence which we see displayed from the simple impulse to receive the food which is brought within their reach, as observed in the polypus, through the higher manifestations in the cunning fox, the sagacious elephant, the faithful dog, and the exalted intellect of man, which is capable of indefinite expansion. Such are some of the general aspects in which we are to contemplate the animal creation. Two points of view should never be lost sight of or disconnected; namely, the animal in respect to its own organization, and the animal in its relation to creation as a whole. By adopting too exclusively either of these points of view, we are in danger of falling either into gross materialism, or into vague and profitless pantheism. He who beholds in nature nothing besides organs and their functions, may persuade himself that the animal is merely a combination of chemical and

* See Martin's "History of Man and Monkey," pp. 200–209, and the whole work, from which the above is drawn.

mechanical actions and reactions; and thus becomes a materialist. On the contrary, he who considers only the manifestations of intelligence and of creation, without taking into account the means by which they are executed, and the physical laws by virtue of which all beings preserve their characteristics, will be very likely to confound the Creator with the creature. It is only as it contemplates, at the same time, matter and mind, that natural history is true to its character and dignity, and leads to its worthiest end, by indicating to us the execution of a plan fully matured in the beginning, and invariably pursued; the work of a God infinitely wise, regulating nature according to inscrutable laws, which he has himself imposed on her. The mind of man—as displayed in the exercise of reason, memory, imagination, hope, retrospection, comparison, imitation; in a perception of the sublime, the beautiful, and the ridiculous; in friendship, love, and the various social affections; and, as involving speech, contradistinguished from mere cries or sounds—harmonizes with his physical endowments, and proclaims him the lord of creation. 'And God said, Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over all the earth, and over every creeping thing that creepeth upon the earth. So God created man in his own image.'"

The right of man, therefore, to an isolated station, at the head of the animal kingdom, is, says Dr Hall,* founded upon just and solid grounds. Every thing connected with his history forces the conviction upon us, that he not only differs from the mammals, but is elevated above them. His physical organization accords with his mental endowments, and is befitting a being whose hopes and views are not bounded by mortality. Who that contemplates the personifications of human beauty, embodied in the noble statue of Apollo, or in the lovely figures of the Graces, by Canova, or in the Venus of antiquity, dreams of the affinity of the ourang? The at-

* "Analytical Synopsis of the Natural History of Man."

tempt to degrade man to the level of the ape, because the ape has the anterior limbs organized as graspers, or rude hands, is hardly justifiable in true philosophy. Physical differences, of sufficient magnitude, exist between man and the simiæ, to forbid his amalgamation with them; much less with the beings of which any other order is composed. And though Linnæus and others could find no characters by which to distinguish between man and the monkey—and though the group primates of Linnæus has been revived by modern naturalists—every arrangement grouping together man, the monkeys, and the bats, carries with it (in spite of all authority), like the statue of clay and metal, the palpable tokens of its own incongruity; and, as Mr Lawrence well observes, "the principles must be incorrect which lead to such an approximation."

In addition, however, to those broad and prominent distinctions already enumerated, the human race, in contrast with all other animals, use fire—sing—laugh—weep tears of sympathetic joy and sorrow—change their habits—vary their employments—diversify their methods for attaining the same ends—provide various means of transportation, both by sea and land—construct and diversify their habitations in adaptation to climate and condition—have arts, languages, and laws—are possessed of intellect, imagination, and reason—are endowed with the mysteriously sublime power of conscience, a sense of responsibility, a knowledge of right and wrong, an anticipation of immortality and of future retribution, a belief in God, the maker, preserver, and the judge of all, and a constant fear of death and eternity.

"It is," says Dr Hoppus, "man's intellect, and his moral sense—his conscious capacity of an excellence he has never reached—his inward vision of the true, the beautiful, and the good—that invest him with a dignity which belongs to him alone of all earthly things; and, more than any mere external superiority, mark him as a creature of a higher order, and adapted to nobler ends, than the rest, between which and himself

there is a wide and inaccessible distance. It is true that other animals not only often excel man in the perfection of their senses, but also give unequivocal indications of possessing other faculties. They recognise the past, and are influenced by association. They appear to dream. Like man, too, they are capable of a variety of affections and emotions. Like him, they can be agitated with terror, and can anticipate pain and danger. When provoked or injured, they are enraged; and when humanely treated and caressed, they often show grateful returns. They exhibit a sagacity, between which and reason it is not always easy to draw the line. Some naturalists, whose talents and researches entitle them to the highest deference, would say that even the infusorial animalcules, the polygastrica or polycystica (some of which are not more than 1-2000th of a line in their greatest diameter, and revel in a single drop of water, or in the fluids of other animals), live an age of 'emotion and thought' in their ephemeral life of a few hours. But, without inquiring how low in the scale of being we are to trace the existence of something more than mere animal sensibility and blind mechanical instinct, we certainly cannot continue to ascend without meeting with something more, even before we reach the highest point. If we may, with the naturalist, speak of the pectoral and caudal fins of fishes as their hands and feet—the analogue of these parts in the quadrumana and bimana—we may surely say, when we observe the sagacity and the affections of the animals most conversant with man, and which have sometimes been termed his 'friends,' that they have a mind, in many respects, the analogue of his own. Still, their limited range of understanding is evinced in their want of rational curiosity —in their appearing incapable of wonder in the midst of a universe where all is wonderful—in their deficiency of moral feeling, and the sense of a Creator.

"Man advances in knowledge and attains to truth; but his fellow-animals exhibit no progression. Their life is uniform from age to age. Every individual has all the knowledge of

its species—every species all the knowledge of its progenitors. The bird still builds her nest, the beaver his house, the bee her cell, as they ever did; and while the architecture of man has improved, from the rude wooden hut of the Nomadic tribes to the immortal temples of Greece, the workmanship of the lower animals has always been so perfect in its kind as to need no improvement. It is true that the sagacity (as we term it) of animals is quite a distinct manifestation from those wonderful instincts which seem to operate almost as mechanically as the physical laws of nature; and this sagacity appears sometimes to approach very nearly to reason. But we soon perceive, on the comparison, how widely different is the reason of the lower animals from that of man. If they can ever be said to reason at all, their reasoning is but as a single link—it is never carried out into a long chain. Man has a reason that can stretch itself forward into a continuous series—a reason which allies itself with æsthetical and moral feeling, and with religion.

"One of the great characteristics of man is the power he possesses of reflecting on the phenomena of his own consciousness. This reflex consciousness is at the same time a deep and unfathomable mystery of his nature. Our practical familiarity with the operations of our own minds, indeed, prevents us from being fully alive to the marvellous constitution of the inner man. The internal scenery of consciousness is often viewed without any sentiment of novelty, like the visible objects we have been accustomed to from infancy; all is coeval with the memory of ourselves. It is, perhaps, only when we survey the results of mind, that we become adequately open to the impression of its grandeur and dignity among created things. If the vast and magnificent temple which is the most striking memorial of the genius of Sir Christopher Wren, made the sepulchral marble superfluous, and his best eulogy was the inscription, *Si monumentum requiris, circumspice*,—how true is it, in the general, that man's greatness is best seen in his works? Alas, that such a being should, by a perverse and

evil will, often place himself in a depth of degradation to which the brutes cannot descend!"*

We are brought, therefore, to the indubitable conclusion, that man of every race and clime is separated by natural, necessary, and permanent distinctions of the most important characters, from all other animals, and that he constitutes an order and a genus by himself. Such is the position at present maintained by all naturalists of any eminence or worth.

NOTE A.

In a "Description of Two additional Crania of the Engé-ena (Troglodytes gorilla, Savage), a second and gigantic African species of a Man-like Ape, from Gaboon, Africa," by Jeffries Wyman, M.D.† it is said:—"It is interesting to contrast the measurement of the cranial capacity of these members of the quadrumanous group with that of some of the human races. It results from Dr Morton's table, at page 263 of this volume, that the smallest mean capacity in man is that derived from Hottentots and Australians, which equals only 75 cubic inches, while that of the Teutonic nations amounts to 90 cubic inches. The maximum capacity of the engé-ena, is therefore considerably less than one-half of the mean of the Hottentots and Australians, who give us the minimum average of the human races."

In man the intermaxillary bones form a projecting ridge on the median line, both in and below the nasal orifice, and at the middle of the border of this opening form the projecting "nasal spine," which is not met with in any of the lower animals, and is, therefore, *an anatomical character peculiar to man.* With regard to this conformation of the intermaxillary bones, the engé-ena recedes farther from man than the chimpanzee. Two infra-orbitar

* On the Superiority of Man to all other Animals, see Carpenter's Human Physiology, pp. 67-76. Agassiz regards man as widely distinguished from even the highest kind of monkeys, Zoology, p. 40, ch. iv. p. 43, &c., and p. 641. See also Dr Goode's Book of Nature; Brande's Cyclopedia, art. Man; Rees' Cyclopedia, art. Man; London Quarterly Review, Jan. 1850, p. 8. See also Martin's Natural History of Man and Monkeys. London, 1841, p. 338, &c.

† Read before the Boston Society of Natural History, October 30, 1849; and see in the Edinburgh New Philosophical Journal, for January 1850.

foramina exist on each side. The crests are not so well developed as in the cranium just described. The occiput having been in part destroyed, the cavity of the cranium is completely exposed. A groove for the lodgement of the longitudinal sinus is well defined; "digital impressions," formed by the cerebral convolutions, exist, but not well marked, the crista-galli is merely rudimentary, and is represented by a very slight median ridge, the olfactory fossa is quite deep, the cribriform plate being on a level with the middle of the orbit; about five parallel grooves for the lodgement of the branches of the dura matral artery exist on each side.

Zoological position of the Engé-ena.

With the knowledge of the anthropoid animals of Asia and Africa which now exist, derived from the critical examinations of their osteology, their dentition, and the comparative size of their brains, by various observers, especially Geoffroy, Tiedemann, Vrolik, Cuvier, and Owen, it becomes quite easy to measure, with an approximation to accuracy, the hiatus which separates them from the lowest of the human race. The existence of four hands instead of two, the inability to stand erect, consequent on the structure of a skeleton adapted almost exclusively to an arboreal life, the excessive length of the arms, the comparatively short and permanently flexed legs, the protruding face, the position of the occipital condyles in the posterior third of the base of the skull, and the consequent preponderance of the head forwards, the small comparative size of the brain, the largely-developed canines, the interval between these last and the incisors, the three roots to the bicuspid teeth, the laryngeal pouches, the elongated pelvis, and its larger antero-posterior diameter, the flattened and pointed coccyx, the small glutæi, the smaller size of the lower compared with the upper portion of the vertebral column, the long and straight spinous processes of the neck,—these, and many other subordinate characters, are peculiarities of the anthropoid animals, and constitute a wide gap between these and the most degraded of the human races, so wide that the greatest difference between these last and the noblest specimen of a Caucasian, is inconsiderable in comparison.

Whilst it is thus easy to demonstrate the wide separation between the anthropoid and the human races, to assign a true position to the former among themselves is a more difficult task. Mr Owen, in his earlier Memoir, regarded the *T. niger* as making the nearest approach to man, but the more recently discovered *T. gorilla*, he is now induced to believe approaches still nearer, and regards it as "the most anthropoid of the known brutes."* This inference is derived from the study of crania alone, without any reference to the rest of the skeleton.

* Op. Cit., vol. iii. p. 414.

After a careful examination of the Memoir just referred to, I am forced to the conclusion, that the preponderance of evidence is unequivocally opposed to the opinion there recorded; and, after placing side by side the different anatomical peculiarities of the two species, there seems to be no alternative but to regard the chimpanzee as holding the highest place in the brute creation. The more anthropoid characters of the *T. gorilla* which are referred to by Professor Owen, are the following:—

1. "The coalesced central margins of the nasals are projected forwards, thus offering a feature of approximation to the human structure, which is very faintly indicated, if at all, in *T. niger*."* This statement is applicable to all the crania which I have seen, and especially to the two crania described in this paper. Nevertheless, the extension of the nasals between the frontals, or the existence of an additional osseous element, is a mark of greater deviation from man.

2. "The inferior or alveolar part of the pre-maxillaries, on the other hand, is shorter and less prominent in *T. gorilla* than in *T. niger*, and, in that respect, the larger species deviates less from man."† The statement in the first portion of this sentence is certainly correct, but a question may be fairly raised on that in the second. The lower portion of the nasal opening in the engé-ena is so much depressed, especially in the median line, that the intermaxillary bone becomes almost horizontal, and the sloping of the alveolar portion takes place so gradually, that it is difficult to determine where the latter commences, and the nasal opening terminates, and in this respect, it deviates much farther from man than *T. niger*.

3. "The next character, which is also a more anthropoid one, though explicable in relation to the greater weight of the skull to be poised on the atlas, is the greater prominence of the mastoid processes in the *T. gorilla*, which are represented only by a rough ridge in the *T. niger*."‡

4. The ridge which extends from the ecto-pterygoid along the inner border of the foramen ovale, terminates in *T. gorilla* by an angle or process answering to that called "styliform" or "spinous" in man, but of which there is no trace in *T. niger*. §

5. "The palate is narrower in proportion to the length in the *T. gorilla*, but the premaxillary portion is relatively longer in *T. niger*." ‖

These constitute the most important, if not the only, characters given in Professor Owen's Memoir, which would seem to indicate that the engé-ena is more anthropoid than the chimpanzee, and some of these, it is seen, must be received with some qualification.

If, on the other hand, we enumerate those conditions in which the engé-ena recedes farther from the human type than the chim-

* Op. Cit., p. 393. † P. 39. ‡ P. 394. § P. 395. ‖ Ibid.

panzee, they will be found far more numerous, and by no means less important. The larger ridge over the eyes, and the crest on the top of the head and occiput, with the corresponding development of the temporal muscles, form the most striking features. The intermaxillary bones articulating with the nasals, as in the other quadrumana and most brutes, the expanded portion of the nasals between the frontal,—or an additional osseous element, if this prove an independent bone,—the vertically broader and more arched zygomata, contrasting with the more slender and horizontal ones of the chimpanzee, the more quadrate foramen lacerum of the orbit, the less perfect infra-orbitar canal, the orbits less distinctly defined, the larger and more tumid cheek-bones, the more quadrangular orifice with its depressed floor, the greater length of the ossa palati, the more widely-expanded tympanic cells, extending not only to the mastoid process, but to the squamous portion of the temporal bones,—these would of themselves be sufficient to counterbalance all the anatomical characters stated by Professor Owen, in support of the more anthropoid character of the engé-ena.

When, however, we add to these the more quadrate outline of the upper jaws, the existence of much larger and more deeply-grooved canines, molars with cusps on the outer side, longer and more sharply pointed, the dentes sapientiæ of equal size with the other molars, the prominent ridge between the outer posterior and the anterior inner cusps, the absence of a crista-galli, a cranial cavity almost wholly behind the orbits of the eyes, the less perfectly marked depressions for the cerebral convolutions, and above all, the small cranial capacity in proportion to the size of the body, no reasonable ground for doubt remains, that the engé-ena occupies a lower position, and consequently recedes farther from man than the chimpanzee.

The whole subject, in addition to the general observations quoted from him, will be found treated with great minuteness by Mr Martin in his "Natural History of Man," from p. 1, to p. 194, where he examines the brain, the osseous system, the teeth, the digestive organs, the integuments and clothing of man, in comparison with monkeys. See also from p. 338 to p. 545. See also "Dr Scouler's Remarks in Dr King's Geology and Religion," pp. 110–112.

NOTE B.

"It is now time," says Mr Otway,* "after perhaps too tediously laying down the opinions of others, to state my own; and it is, that I see nothing in the structure, or instincts, or intellectual capaci-

* "The Intellectuality of Animals." Dublin, 1847.

ties of *any* animal but *man*, that has a tendency to the renewal of life in another world; observing, as I do, various intellectual powers capable of promoting their own wellbeing, and of contributing to the welfare of man, still I find no power of accumulating knowledge. The elephant is now no wiser than he was in the days of Alexander; the dog has not learned any thing from his forefathers—he has not taken advantage of their mistakes or attainments; the ant advances not in the polity of her republic; the bee was as good a mathematician a thousand years ago. There is no progression—no power of combination; and this is as it should be; it is the means of upholding God's original grant of dominion to man. Give animals but a sense of power and a capability of combination, and the brute or the insect creation could and would drive man from the face of the earth. But what is of still more consequence, I find no development whatsoever of the religious principle—not a spark of the expectation of another life. With man we see in the lowest of his species an expansiveness in the intellectual and moral structure, that produces longings for immortality; and within the most darkened of the human race you can light up the aspirations, the hopes, and fears connected with another world. Compare in this way the lowest of the human family—the Bushmen of South Africa, whom Captain Harris, in a recent work describes, as follows:—'They usually reside in holes and crannies in rocks; they possess neither flocks nor herds; they are unacquainted with agriculture; they live almost entirely on bulbous roots, locusts, reptiles, and the larvæ of ants; their only dress is a piece of leather round their waist, and their speech resembles rather the chattering of monkeys than the language of human beings.' Now, there is little or nothing here better than what is found amongst many of the inferior animals. But, let us take a young Bushman, and put his mind under a right educational process, and we shall soon excite in him what we must ever fail to do in the young monkey, or dog, or elephant. We can communicate to him the expansiveness that belongs to an heir of immortality; within him are the germs of faith, hope, and religious love, which do *not* exist in inferior animals."

For the following observations on the human soul, and its distinctiveness from animal life, both in men and brutes, I am indebted to my friend, the Rev. Joseph Baylee:—

"The Scriptures teach us that man is a threefold being. 'I pray God,' says the apostle, 'your whole spirit, and soul, and body, be preserved blameless unto the coming of our Lord Jesus Christ.' 'Your spirit'—πνεῦμα—*i. e.* your rational soul; 'your soul'—ψυχὴ—*i. e.* your animal life; 'your body'—σῶμα—your corporeal frame. Those two living, *thinking* principles are again distinguished by him in his epistle to the Hebrews. 'The word of God is able to divide asunder soul and spirit'—διϊκνούμενος ἄχρι μερισμοῦ ψυχῆς τε καὶ πνεύματος—penetrating as far as to the division of soul

and spirit. We are here taught two important truths respecting our thinking principle—that it is twofold, the one part perfectly distinct from the other, and yet both so interwoven that it requires divine skill to separate them.

"The Hebrew language, which seems to have been divinely suited to theological purposes, is carefully accurate in distinguishing these two lives in man. In the account of man's original formation, we are told that God *breathed* into his nostrils the *breath* of life, and man became a living soul. The word here rendered breath is נשמה (neshama), and is applied exclusively throughout the Scriptures to *rational* powers. In our translation it is frequently rendered *breath*, probably from its having been *breathed* into man by God. From a careful examination of all the passages where it occurs, it will be found—1. It is never applied to animals; 2. It is applied to man to distinguish him from animals; 3. It is applied to man's rational soul, as distinguished from his animal life; 4. It is applied to God.

"The word רוח (ruach) spirit, is applied equally to animals and to men, and also to the wind, and to the Spirit of God. As far as it relates to our present inquiry, it seems to be the generic term for sentient life, of which נשמה (neshama) is a species exclusively applicable to rational life.

"רוח (ruach) spirit, is applied to the sentient powers of men and beasts in Eccl. iii. 21, 'Who knoweth the spirit (רוח) of man that goeth upward, and the spirit (רוח) of a beast that goeth downward to the earth.'

"On the other hand, man is distinguished from animals by his having a (נשמה) rational soul. 'All the spoil of these cities, *and the cattle*, the children of Israel took for a prey unto themselves; but *every man* they smote with the edge of the sword, until they had destroyed them, neither left they any to *breathe*'—לא השאירו כל־נשמה—they did not allow to remain any rational soul.—(Josh. xi. 14.)

"Here it is plain that the distinction between man and the inferior animals is the נשמה rational soul.

"Again, we find man declared to be possessed of two living principles, the רוח animal life, and נשמה rational life. Job xxxiv. 14, 15—'If he set his heart upon man, if he gather unto himself his spirit (רוח animal life) and his breath (נשמה rational life), all flesh shall perish together, and man shall turn again into dust'—thus assigning a twofold deprivation as the cause of death. To the same purpose Isaiah says—'God the Lord giveth breath (נשמה rational life) unto the people upon it, and spirit (רוח animal life) to them that walk therein' (chap. xlii. 5)—recognising two living principles in man. We might cite other examples.

"This breath (נשמה rational life) is declared to be the seat of understanding. 'The spirit (נשמה) of man is the candle of the Lord, searching all the inward parts of the belly.'—(Prov. xx. 27.)

'There is a spirit (or He, the Spirit) is in man, and the inspiration (נשמה breath or rational powers) of the Almighty giveth them understanding.'—(Job xxxii. 8.) We here find the word applied to God, as also in Job xxxiii. 4—'The spirit of God hath made me, and the *breath* (נשמה) of the Almighty hath given me life.'

"The word occurs only twenty-four times in the Old Testament, and is always (with two exceptions) rendered by some derivative of πνεω (πνευμα, twice, εμπνευσις once, εμπνεον four times, αναπνοη once, πνοη fifteen times). It is never rendered by ψυχη. Between the period of the Septuagint translation, and the writings of the New Testament, πνευμα seems to have taken the place of πνοη, for the latter is not once employed in the New Testament to designate the rational soul. There is one ambiguous phrase (ζωη και πνοη), life and breath, in Acts xvii. 25. Indeed, πνοη occurs but twice in the New Testament.

"We have thus seen that man agrees with animals in having an organized material frame—a body, and a living principle animating that frame, and capable of thought and will. Superadded to this, man has a rational soul. It is most probable that all the powers of the rational soul have their corresponding powers in the animal life. As an animal, man is capable of love, joy, hatred, fear, hope, &c. Our actions are the result of the combined energy of these two principles, making the body the instrument of their will.

"These two principles harmonize in man's natural state. But when the Holy Ghost renews the soul, the animal part is left unrenewed, and then commences the struggle referred to by the Apostle —'I delight in the law of God, after the inward man, but I see another law in my members warring against the law of my mind.' —(Rom. vii. 22, 23; 1 Pet. ii. 11.)

"This continued struggle produces all that defective obedience, tainted service, and defilement of life which beclouds the Christian's course, until he has laid down his vile body, awaiting its renovation in the morning of the resurrection."

CHAPTER II.

ON THE NATURE AND IMPORTANCE OF THE DOCTRINE OF THE UNITY OF THE HUMAN RACES.

PART SECOND.—ETHNOLOGY.

A multiplicity of protoplasts for a single species is a contradiction in terms. If two or more such individuals (or pairs), as like as the two Dromios, were the several protoplasts to several classes of organized beings (the present members being as like each other as their first ancestors were), the phenomenon would be, the existence in nature of more than one undistinguishable species; not the existence of more than one protoplast to a single species.—Dr Latham.

Man has his daily work for body or mind
Appointed, which declares his dignity,
And the regard of Heaven on all his ways;
While other animals inactive range,
And of their doings God takes no account.—Milton.

We have now shown that, even considered as an animal, and in his purely physical and natural endowments—that is to say, anthropologically—all the races of man are essentially distinct from the lower animals, and that they are all to be arranged under the separate GENUS HOMO.

But naturalists have found it necessary, in accordance with the principles of science and the facts before them, to subdivide animals into SPECIES, as well as into GENERA, ORDERS, and DIVISIONS. Not to dwell fully on this point, which will afterwards come under consideration, we will simply observe here that SPECIES, like GENUS, ORDER, and CLASS, is founded upon fixed and permanent forms of being; exhibiting, indeed, cer-

tain modes of variation, of which they may be, more or less, susceptible; but maintaining throughout those modifications a sameness of structural essentials, transmitted from generation to generation, and never lost by the influence of causes, which otherwise produce obvious effects. It is by keeping this principle in view that we unhesitatingly decide upon the specific distinction between fossil reliquiæ of extinct animals, and those now extant, of near affinity; between the mammoth and the Asiatic elephant; between the fossil species of rhinoceros, and their living representatives.*

Species are, therefore, permanent. In his work on the principles of zoology, published in 1840, M. Agassiz defines species to be "the lowest term to which naturalists descend, if we except certain peculiarities generally induced by some modification of native habits, such as are seen in domestic animals. The species," he adds, "is founded upon less important distinctions; such as colour, size, proportions, structure, &c." Every animal has its own characters, by which it is distinguished, and which constitute it a species. Each species consists of individuals. Individuality is the ultimate division; and, when we designate a species, we include, in that title, every similar individual. Thus, when we call the tiger a species, we include, in that word, every tiger—one being the representative, or prototype, of all. For those minor distinctions termed VARIETIES, the terms *breed*, in reference to the lower animals, and *race*, when we speak of man, are employed.†

* Martin.

† A variety, says Dr Latham, is a class of individuals, each belonging to the same species, but each differing from other individuals of the species in points wherein they agree amongst each other.

A race is a class of individuals, concerning which there are doubts as to whether they constitute a separate species or a variety of a recognised one. Hence, the term is subjective—*i.e.* it applies to the opinion of the investigator rather than to the object of the investigation; so that its power is that of the symbol for an unknown quantity in algebra. The present writer having as yet found no tribe, or family, for which a sufficient reason for raising it to a new species has been adduced, has either not used the word race at

Now, this subject has given origin to a very different controversy from that occasioned by the theory of Larmarck, with whom there is no such thing as either species, genus, or any fixed and permanent form of being. For, granting that no animal by any series of mystical transformations can become an animal of a different species, it has been made a question whether *permanent* varieties are not marks of specific difference, and therefore of different original parentage. This question is much agitated as it respects the different breeds of horses, cows, swine, and other animals, but especially as it regards the human family. Among men there are, and ever have been since the first era of historical information, numerous and important differences both as it regards colour, hair, physiognomy, and anatomical structure. The classification of these various races of men has excited the curiosity, and employed the ingenuity of many able and learned men, some dividing them according to their locality, as Linnæus, Buffon, Blumenbach, Cuvier, Fischer, Dumeril, Desmoulins, M. Borg de St. Vincent, Pickering, &c.;* others, according to their colour, as Lesson, &c.;† others, by their skulls, and other varieties of form and structure, as Prichard;‡ others, according to both location and form, as Martin§ and Latham.‖ With this difference as to the division of the human races, there is equal variety among naturalists as to their number; some, as Linnæus, Blumenbach, and Martin, dividing them into five divisions; others, as Buffon, into six; others, as Cuvier, Latham, &c., into three; others, as Fischer, Prichard, &c., into seven; others, as Lesson and Dumeril, into six;

all, or used it inadvertently. Its proper place is in investigation, not in exposition.

* See presented in Martin, pp. 213, 214; and Fischer's "Synopsis Mammalium."

† "Mammalogie," and "Species des Mammiferes."

‡ "Researches."

§ "Natural History of Man and Monkey," p. 219, &c.

‖ "The Natural History of the Varieties of Man," by Robert Gordon Latham. London, 1850. A very able work.

others, into two, as Virey; others, into eleven, as Desmoulins; others, into seventeen, as M. Borg de St. Vincent; and others, into twenty-two families, as Dr Morton. "I have seen," says M. Pickering, "in all eleven races of men, and although I am hardly prepared to fix a limit to their number, I confess, after having visited so many different parts of the globe, I am at a loss where to look for others;" and, he continues, in his zoological deductions, "there is, I conceive, no middle ground between the admission of eleven distinct species in the human family and the reduction to one." Mr Burke again, of the Ethnological Journal, is confident that the number of distinct races must be indefinitely multiplied. Now, one of the most interesting and important questions, which can be agitated is, whether the human races are VARIETIES—that is, the result of a combination of causes, which have operated on different offsets of one origin—or are ABORIGINAL; and, if the latter, whether this aboriginality, which involves the creation of them as they are, destroys specific identity, so that the same species may have distinct primordial beginnings.

This inquiry constitutes ETHNOLOGY, which determines the relations of the different varieties of mankind to each other.

"Ethnology," adds Mr Latham,* "is more immediately connected with history; differing from it chiefly in its object, its method, and its arena.

"Whilst history represents the actions of men as determined by moral, ethnology ascertains the effects of physical influences.

"History collects its facts from testimony, and ethnology does the same; but ethnology deals with problems upon which history is silent by arguing backwards, from effect to cause.

"This throws the arena of the ethnologist into an earlier period of the world's history than that of the proper historian.

"It is the method of arguing from effect to cause which gives to ethnology its scientific, in opposition to its literary aspect, placing it, thereby, in the same category with geology,

* P. 560.

as a palæontological science. Hence it is the science of a method—a method by which inference does the work of testimony.

"Furthermore, ethnology is history in respect to its results; geology, in respect to its method. And, in the same way that geology has its zoological, physiological, and such other aspects, as constitute it a mixed science, ethnology has them also."

On this subject there is, we are sorry to say, great differences of opinion. Among the ancients the views entertained on this subject were defined by the presence or absence of divine revelation. Among the Jews to whom the word of God was proclaimed, and among whom the true knowledge of man's original history consequently prevailed, it was universally held, as it has been by Christians until now, that all the varieties of the human family have originated—from some causes, either supernatural and miraculous, or otherwise—among the descendants of one original parentage. Among the other nations of the earth, including Greece and Rome, the opinion prevailed that every country had its own race of inhabitants, created upon its own soil, and under the tutelage of that particular deity by whom the country was governed. This opinion, however, as it was essentially heathen in its origin and character, so did it prevail or perish just as Paganism prevailed or gave place to the religion of heaven, and to the divinely-inspired doctrine of the unity of all the races of men.*

When, however, in modern times, infidelity sought to erect its dominion upon the ruins of Christianity, Voltaire, Rousseau, Peyrere, and their followers, introduced the theory of an original diversity of human races, in order thereby to overthrow the truth and inspiration of the sacred Scriptures. They had no manner of doubt that the unity of the human races is every where taught in the Bible; but they argued, that in all their varieties there are impassable lines—that they are dis-

* Miaon-tse, the name of the aboriginal Chinese, means *the children of the soil.*—"Latham on the Varieties of Man," p. 25.

tinct species—that they could not have sprung from a single pair—and that the Bible, therefore, cannot be true. In this opinion, and for the same purpose, modern infidel writers—such as Kames, Gibbon, Paine, &c.—have concurred. In the present day, this theory of a plurality of distinctly-created races of men has, therefore, found currency among infidel writers, who have employed it for the avowed purpose of opposing Christianity. Dr Nott, in his lectures,* attempts to show that this doctrine of man's unity is impossible—that the Bible does not teach it—and that those passages from which the doctrine of the unity of the races of mankind is gathered, are either no part of the inspired record, or are misinterpreted; that the books ascribed to Moses are a mere collection of old traditions and contradictory myths, many of them entirely unworthy of credit; and that these books were probably compiled at a much later period than that usually ascribed to them, while the Mosaic chronology is irreconcilable with the discoveries of modern science, and the revelations of Oriental and Egyptian archæology. Voltaire held that there were "as well marked species of men as of apes." Kames was more unhappy in his illustration. "If the only rule afforded by nature for classing animals can be depended upon," we find him saying, "there are different species of men as well as of dogs." Gibbon, though his remark on the subject takes the characteristic form of an ironical sneer, in which he says the contrary of what he means, deemed it more natural to hold that the various races of men originated in those tracts of the globe which they inhabit, than that they had all proceeded from a common centre and a single pair of progenitors. Mr Burke,† Drake,‡ and others, have adopted and published the same views, and a cordial welcome has been given to the work of Dr Nott, by certain scholars of France and Germany, who have translated the doctor's first two lectures, "On the Natural

* On the Biblical and Physical History of Man.

† Ethnological Journal.

‡ Book of the American Indians.

History of the Caucasian and Negro Races, delivered in Mobile in 1844," into several of the languages of Europe.

The same theory, however, has also been put forth by men of the highest scientific characters, who found their conclusions upon what they deem scientific observations, experiment, and fact. How far this opinion prevails in Great Britain we are unable to say, but that it has its advocates even here there can be no manner of doubt. Hamilton Smith, in his "Natural History of the Human Races," has much that would argue his belief in this theory; and Mr Martin, in his "Natural History of Man and Monkeys,"* and Professor Lowe,† seem to lean to the same opinion; while Dr Nott—after affirming that "to his mind, modern discoveries in geology and natural history are totally irreconcilable with the Book of Genesis; and that of the genus homo there are several distinct species; that physical causes cannot change a white man into a negro, and that to say this change has been effected by a direct act of Providence, is an assumption which *cannot be proved, and is contrary to the great chain of nature's laws*"—actually asserts, that while "sorry to come in collision with those I respect—with Agassiz, Morton, Pickering, and all the leading Egyptologists of Europe, on my side—there does not remain a shadow of a doubt on my mind that I am right, and that the *truth* will soon prevail."

It is, however, among the scientific naturalists and physiologists of the United States that the theory of a plurality of originally created races of men has most extensively prevailed, and this, too, *quite* as much in the north as in the south, including the names of Professor Agassiz, of world-wide reputation, and of the justly celebrated Dr Morton, author of "Crania Americana," "Crania Egyptiaca," and other learned works. The theory advocated by these naturalists is, that though the human species be properly but one, it is, according

* Natural History, p. 169.

† Professor Lowe, in his work on the Domesticated Animals of Great Britain. Introduction.

to the known analogies both of plants and animals, that it should have originated in various centres—a conclusion which the strongly-marked varieties of the race which occur in certain well-defined geographic areas, serve to substantiate, or at least to render the most probable. Under the influence of such distinguished men, these views are likely to be very widely diffused, and incorporated with the teaching of some of the most influential universities, seminaries, and periodicals, of that country. In the earnest discussions which have been entered upon in the progress of this inquiry, Dr Kneeland, of Boston, delivered the annual lecture before the Harvard Natural History Society, in May last. He took the ground, that the received opinion that all human beings are descended from one pair—Adam and Eve—is not supported by the Mosaic record, and, according to known facts and well-established analogies, cannot be true. He thus coincides with the recently-expressed opinion of Professor Agassiz, who, it is said, will shortly give to the public his views on this interesting question at some length.*

British naturalists are not less likely to take an active part in this discussion, because against the new ground assumed by Agassiz, many of the old facts and arguments, on which Dr Prichard relied for the determination of this question, will not bear. Already, Professor Edward Forbes has, in an illustrious manner, sustained the doctrine advocated by Linnæus, Prichard,† Humboldt,‡ Bachman, and other naturalists, and proved that analogy and facts are not in favour of the creation of the same species in a plurality of centres; but that all plants and animals of the same species are members of specific centres beyond their area, and have migrated to their present provinces over continuous land before, during, or after the glacial epoch.§

* See also the "Christian Register" of Boston, "Christian Examiner and Review," of Boston, "The Washington Union," "The Democratic Review," &c.

† "Researches," vol. i. ‡ "Cosmos," vol i. p. 363.

§ "Memoirs of the Geological Survey of Great Britain," and quoted in

Dr Knox, in his "Lectures on Races of Men,"* says—

"I, in opposition to these views, am prepared to assert that race is every thing in human history; that the races of men are not the result of accident; that they are not convertible into each other by any contrivance whatever.

Humboldt's "Cosmos," and Somerville's "Physical Geography," vol. ii. p. 75. Professor E. Forbes has shown that some of the primary floras and faunas have spread widely from their original centres over large portions of the continents, before the land was broken up into the form it now has; and thus accounts for the similarity, and sometimes identity, of the plants and animals of regions now separated by seas; as, for example, islands which generally partake of the vegetation and fauna of the continents adjacent to them. Taking for granted the original creation of specific centres of plants and animals, Professor E. Forbes has clearly proved that "the specific identity, to any extent, of the flora and fauna of one area with those of another, depends on both areas forming, or having formed, part of the same specific centre, or on their having derived their animal and vegetable population by transmission, through migration, over continuous or closely contiguous land; aided, in the case of Alpine floras, by transportation on floating masses of ice. Since man's appearance, certain geological areas, both of land and water, have been formed, presenting such physical conditions as to entitle us to expect within their bounds one, or in some instances more than one, centre of creation, or *point of maximum of a zoological or botanical province.* But a critical examination renders evident," the Professor adds, "that, instead of showing distinct foci of creation, they have been in all instances peopled by colonization, *i. e.* by migration of species from pre-existing, and, in every case, pre-Adamic provinces. Among the terrestrial areas, the British isles may serve as an example; among marine, the Baltic, Mediterranean, and Black Seas. The British islands have been colonized from various centres of creation in (now) continental Europe; the Baltic Sea from the Celtic region, although it runs itself into the conditions of the Boreal one; and the Mediterranean, as it now appears, from the fauna and flora of the more ancient Lusitanian province." Professor Forbes, it is stated further, in the report of his paper to which I owe these details—a paper read at the Royal Institution in March last—"exhibited, in support of the same view, a map, showing the relation which the centres of creation of the air-breathing molluscs in Europe bear to the geological history of the respective areas, and proving that the whole snail population of its northern and central extent (the portion of the Continent of newest, and probably post-Adamic, origin) had been derived from foci of creation seated in pre-Adamic lands."*

* "The Races of Men," by Robert Knox, M.D., Lecturer on Anatomy, and Corresponding Member of the National Academy of Medicine of France. See pp. 3, 8, 28, and 245.

* See Somerville's "Physical Geography," vol. ii.

"But, it may be said, Christianity has done much. This I doubt. But, admitting it to be the case, its progress is not evident. To me it seems to lose ground. It presents, also, a variety of forms, essentially distinct. With each race its character is altered—Celtic, Saxon, Sarmatian, express, in so many words, the Greek, Roman, Lutheran forms of worship.

"I question the theories of progress in time. If, by progress be meant improvement as regards all animals, some, at least, of the extinct organic world were equal, if not superior, to that now existing. Man was probably there also. It is these, and other such questions, which Jesuits of all denominations (for they are not confined to the Roman Catholic world) declaim against. Hence, also, their dislike to the geologist and the anatomist. Science has nothing to do with such persons; and, but for the frequency of their open and insidious attacks, I should deem it lost time the giving to them even a passing thought.

"Wild, visionary, pitiable theories, have been offered respecting the colour of the black man; as if he differed only in colour from the white races. But he differs in every thing as much as in colour. He is no more a white man than an ass is a horse or a zebra. If the Israelite finds his ten tribes amongst them, I shall be happy."

Man, also, he affirms, has lived through several geological epochs. "The precise geological period," he says, "when man appeared on the earth, has not been determined; nor what race appeared first; nor under what form. But it is evident that man has survived several geological eras. On these points, all is at present conjecture; but, as man *merely* forms a portion of the material world, he must of necessity be subject to all the physiological and physical laws affecting life on the globe. His pretensions to place himself above nature's laws assume a variety of shapes. Sometimes he affects mystery, at other times he is grandly mechanical. Now, all is to be done through the workshop. In a little while, the ultimatum (what is the ultimatum aimed at?) is to be gained through religion;

and thus man frets his hour upon the stage of life, fancying himself something whilst he is absolutely nothing. For him, worlds were made millions of years ago; and yet, according to his own account, he appeared, as it were, but yesterday! Let us leave human chronology to the chronicler of events; it turned the brain of Newton."

Another class of opponents against whom we shall have to contend are the followers of Swedenborg. In the Anglo-American "New Church Repository," conducted by the learned Professor Bush,* in a review of this work, it is said: "We believe that the word of God will allow of an interpretation falling in with either of the chief hypotheses which have been broached; and it is a circumstance which we think will weigh with all candid minds, that it is an interpretation held by the New Church before this question of the races, or of geology, came up for adjustment; and therefore is not the result of after thought, or one got up expressly to meet the pressure of the present case."

With them, the first chapters in Genesis—and, in short, all Scripture—are allegorical, and capable of a mythical and moral interpretation; not, of course, according to the principles of sound criticism which the author followed when he wrote his able work on Genesis, from which we shall have occasion to quote.

"Thus he lays great stress on the passage from Paul, 'God hath made of *one blood* all nations of men,' and conceives that this passage alone is sufficient to settle the matter. But we have not the idea that the best commentators of the day would affirm that the spirit of this passage would be lost if it were made to mean that all men were *morally* of one blood; alike responsible before God, and endowed with the same general human nature."

Professor Bush therefore adds—

"Seeing that, with our views of interpretation, the argument from the literal sense of the first eleven chapters of

* New York, June 1850.

Genesis counts for very little, it will be readily perceived that we do not require so strong a series of proof to convince us of the diversity of origin as do those who hold to the literal sense of those chapters. In fact, we have no necessity for a prejudice towards either side of the question, and are therefore, without any merit on our part, placed in a mental position favourable to arriving at a just estimate of the evidence. Simply, then, as a matter of opinion, it seems to us that, so far as the evidences derived from the natural history of the race go, they preponderate in favour of a diversity of origin. The arguments drawn from the analogies of the animal kingdom look also in the same direction; while the considerations furnished by a study of the languages and traditions of the races have a bearing towards the universal unity of origin. Consequently, we conceive that the strongest point Dr Smyth has made is contained in his fifteenth and sixteenth chapters —on the nature and connection of languages, and on the testimony of history and tradition.

"Thus, on the one hand, it is maintained that known causes are insufficient to account for the present observed varieties of the human race, supposing them to have descended from a single stock; and, therefore, we are obliged to infer that they have descended from several pairs, originally created with the peculiarities which now mark the leading races. A variety of opinion prevails in regard to the probable number of such original pairs; some supposing two different varieties, the white and the black, sufficient to account for all the other shades; others, again, suppose three—the white, black, and yellow, or Mongolian; counting the Malay, or brown race, and the American, or red race, as each varieties of the Mongolian, or the result of mixture with the black. Others, again, are disposed to make out five or six, and an indefinite number, perhaps twenty, different original centres, from which the whole race have proceeded."

On this obscure and difficult question much may, and will be said, on both sides, before it is finally determined with

absolute certainty. And, even were it decided according to the theory of Agassiz—that, in regard to vegetables and the lower animals, all the analogies were in favour of creation in various, and not in specific centres—the question of the unity of the human races would still remain unsettled. Whether, therefore, all men are of one species—whether specific unity implies unity of origin—and whether this unity can be proved historically, as well as scientifically—are points which may be examined, and perhaps resolved, while the *general* analogy of nature, in reference to both the fauna and the flora of our globe is still under doubtful investigation.

And surely, if there is one subject about which the human mind ought to be universally interested, it is the origin, history, and character of man; and if there is one aspect in which this subject is more interesting than another, it is the relation in which men of all races stand to each other, and to their common God and Father in heaven. The importance, therefore, of our present inquiry cannot be overrated. It relates to man, and we must all feel with the Roman poet—"Homo sum, et nihil humanum a me alienum puto." This inquiry bears on ourselves. We are men; and whatever affects the nature, capacities, and destiny of the human family, must equally concern ourselves. The opinions we form of others, must shape their opinions concerning us. Our conduct towards others must, by the law of reciprocity, influence them in their treatment of us. And, as our actions must follow the direction of our conscientious belief, our opinion on this subject has an evident and important bearing on our own interests.

Nor does this influence stop with ourselves. It diffuses itself far and wide. It permeates the family and social circle, and in its widening influence gives tone and character to the political and commercial world. Nay, upon our views of this question the entire interests of humanity are pending. Upon it are suspended the progress of civilization, the diffusion of knowledge, the zeal of Christian and general philanthropy, the elevation or degradation of entire races of men, in short,

the elevation or extinction of all who are not of the particular race, be it black or white, savage or civilized, which succeeds in gaining the ascendency. And this it is by no means certain must be the white race. For if the black races of men, *considered as a whole*, are now rapidly diffusing themselves over various regions of the earth from a variety of centres—if they are acquiring the knowledge and practice of war—if they rapidly double their numbers—if they are capable of a healthy occupation of vast portions of the earth where the white man cannot live, and of becoming well adapted to all other climates—and if they are capable of imitating all the vicious, and murderous, and ambitious propensities of the whites—what may we expect will be the result of a theory and conduct which shall excite throughout this accumulating mass of human beings the fiendish thirst for revenge and retaliation! Either, therefore, all men are of one human family, and thus united by the ties of brotherhood, the claims of humanity, and the obligations of charity, or else there are races of men to be reckoned up by millions, and hundreds of millions, who can regard each other only as enemies or victims.

"Why," asks Hugh Miller,* "should we respect the life of creatures not of our own blood? Bill Sykes tells Fagan the Jew, in 'Oliver Twist,' that he wished he was his dog, 'for,' said he, 'the government that cares for the lives of men like you, lets a man kill a dog how he likes.' But if these tribes be men not of our own blood—men who did not spring from the same source with ourselves, and for whom, therefore, Christianity can make no provision—Why the distinction? It is only to those whom we believe to be of our own blood that the distinction extends. It is as lawful to shoot an ourang-outang, or a chimpanzee, as a dog or a cat; and with but mere expediency to regulate the matter, it might become quite as necessary to hunt down and destroy wild men, as to hunt down and destroy wild dogs."

* See Review of this work by Hugh Miller, in the Edinburgh Witness, July 13, 1850.

Let, then, the theory of a diversity of human races prevail and become general, and this whole question be cast loose from the restraints and authority of the Bible, and of our common humanity, and then the only question will be—"What will be most for mere selfish interest, popularity, or worldly applause?" And hence we find Dr Nott declaring, "The time must come when the blacks will be worse than useless to us. What then? Emancipation must follow, which, from the lights before us, is but another name for extermination." We might, therefore, well say of this theory with Dr Lawrence, "that the moral and political consequences to which this theory would lead are shocking and detestable." And yet this theory is maintained, and for the very purpose of sustaining upon it these barbarous conclusions. Thus, in the "Democratic Review" of New York, for April last, it is declared, that the differences among men "cannot be changed by advanced civilization, or any other means"—"that the philanthropic world for the last fifty years (by missionary efforts) has been proceeding entirely upon a false assumption;" and "that the effects of these efforts is to degrade the white species, and to destroy the dark species," whose destiny it is to be "finally swallowed up." Again, in a very recent review of this work in the same periodical, it is said, "With, according to our view, a very debasing tendency, he (Dr Smyth) seeks to establish a universal brotherhood of black, red, yellow, and white. The brutalizing and soul-degrading theory that the white species are on a level with the incapable blacks, is undoubtedly that disposition which the Saviour so sharply reproves in him who hid his talents in a napkin." In like manner, a writer in another influential organ of public opinion at the north, in the United States,* in a recent notice, says, "A great hindrance to belief is the desire to disbelieve. We are glad to be able to doubt our relationship with the low and vulgar, and most are displeased at Dr Goode's witty saying, that 'the negro,

* The Newark Advertiser.

like the white man, is still God's image, although carved in ebony.'" According to the "Ethnological Journal," also, the determination of the differences of mankind is to lead to "the deduction of principles for human guidance in all the important relations of social existence." "It developes facts and principles whose application will ultimately change the face of the world."

But we further remark, that this question involves the truth or falsity of the Bible, and every interest of Christianity. The theory of a plurality of distinctly-created races of men is necessarily infidel in its tendency. It is in open and direct opposition to the testimony of the Bible. It overthrows not only Moses, but the prophets and apostles also, and thus undermines the Scriptures as a divine record, both of doctrines and of duties. It was for this purpose, as we have seen, the theory was introduced by Voltaire, Rousseau, and Peyrere, and it is for this purpose it is wielded by Paine, Drake, Dr Nott, and others. Neither is this infidel tendency obviated by admitting that the Bible is in part inspired, and in part human and erroneous. For, if this theory is adopted, it is left to every man to decide, according to his own notions and desires, what is, and what is not, revealed. There would be no common standard of truth and duty, and we would be driven to and fro, like storm-tossed and anchorless vessels upon the shoreless billows of an uncharted sea. Neither will this tendency be prevented by allowing the Bible to be inspired, but only addressed to the Caucasian race of men; for the testimony of the Bible to the unity of the races is not found in any one, or in any few passages, but in all its doctrinal and practical teaching, so that, if limited to any one race, it must be proved self-contradictory.

"Zoologically, therefore," as Hugh Miller strongly but truly affirms, "it will be seen that, against this restatement of the question by Agassiz, many of the old facts and arguments do not bear. Theologically, however, in every instance in which it assumes the positive form, and in which, building

on its presumed analogies, and the extreme character and remote appearances of the several varieties of the species to which it points, it asserts that the beginnings of the race must be diverse, and its Adams and Eves many; it is, in effect, the same. On the consequences of the result, it can be scarce necessary to insist. The second Adam died for but the descendants of the first. Nay, so thoroughly is revelation pledged to the unity of the species, that if all nations be not 'made of one blood,' there is, in the theological sense, neither first nor second Adam; 'Christ,' according to the apostle, 'hath not risen, conversion is an idle fiction, and all men are yet in their sins.'"

This tendency of the theory of a plurality of races is not unobserved by many of its advocates. The views of Professor Agassiz, though far from being so openly infidel, are not less dangerous. In his remarks in the American Association, at its meeting in Charleston, in April 1850, made after the presentation of Dr Nott's paper against the unity of the races, M. Agassiz took the opportunity to publish his opinion on this agitated question. He farther said, that, inasmuch as his opinions on this question had been made a matter of frequent inquiry, he would take this opportunity, once for all, to express his views very distinctly on the subject. He said, many mistakes and some ill feeling had arisen among naturalists from not understanding the grounds of the controversy which were assumed by opposing parties. As a general proposition, he would side with those who maintained the doctrine of the unity of the human races, *if by the unity of the race be meant nothing more* than that all mankind were endowed with one common nature, intellectual and physical, derived from the Creator of all men, were under the same moral government of the universe, and sustained similar relations to the Deity. It was quite a different question, whether the different races were derived from the same common human ancestors. For his own part, after giving to this question much consideration, he was ready to maintain that the different races of men were

descended from different stocks, and he regarded this position as fully sustained by divine revelation. The Jewish history was the history, not of divers races, but of a single race of mankind; but the existence of other races was often incidentally alluded to, and distinctly implied, if not absolutely asserted, in the sacred volume. Of this last assertion, he gave in proof, that there were other races of men, coexistent with Adam and his son Cain, dwelling in the land of Nod, and among whom Cain married and built a city.

Either, therefore, the received doctrines of the inspiration and authority of the Bible must be abandoned, and the theory of German rationalists—which regards the Bible as composed of traditionary and mythical legends, whose truth or falsehood must be determined by the rules of historical criticism—must be adopted, or else we must abandon all faith in the Bible and the religion it inculcates. The former is the course taken by Agassiz, and many other naturalists in America; while the latter ground is that which has been openly assumed by Dr Nott, Mr Gliddon, and others.* Momentous interests are therefore involved in the question of the unity or diversity of

* The full sentiments of this gentleman will be learned from the "Ethnological Journal," in No. 7 for December 1848, at page 297. He remarks, as he says, *en passant*—"Under this view, however, the ethnological inquirer is presented with a dilemma, either horn of which is awkward to his orthodoxy, because, if, grounded on the myths of Adam and Eve, he contend for unity of race, he must abandon plenary inspiration, and, with it, Genesiacal chronology in any text or version of the Pentateuch; or, should he advocate the inspired authenticity of Hebrew, Greek, or Samaritan numerals for ante-Abrahamic ages, he must (in the face of incontrovertible facts, conceded by Prichard himself, which shows that, within human record, neither time nor climate has ever transmuted a Caucasian into a negro, or *vice versa*) abandon the hypothetical primitive unity of the now diversified species of mankind." In page 297, he speaks of the contracted systems of English chronographers, which, if superlatively orthodox, are, &c. quoting Volney. See the whole article, from which it is evident, that, while he has devoted four years to Biblical studies (as he says), he has not learned the elementary distinction between the corruption or loss even of the original Hebrew numerals and the consequent knowledge of the true chronology they indicated, and the plenary inspiration of all that really appertains to the Bible, so far as it is proved to be genuine and authentic. A pyramid

the human races, and every man, woman, and child, of every nation, kindred, tribe, and people, are concerned in its discussion.

To aid general readers in the investigation of this subject, is our object in the present work. We aim at being neither exclusively popular, nor exclusively scientific. Our work will, we hope, come within the range of the general reader, while it satisfies the demands of the professional student. We will endeavour to present a comprehensive outline of the whole argument, and a summary of the information gleaned from various works during a series of years.

And here let the reader be requested to observe, and fix in his mind as *necessary* to any clear and satisfactory result, the twofold nature of this question:—The unity of the human races, for which we "contend earnestly," is the identical origin of all mankind, originally from Adam and Eve, and subsequently from Noah and his sons. This question, it must be admitted, is fairly and legitimately a scriptural one. It is plainly beyond the discovery of reason. It lies in regions to which the clue of history offers no guide. It is immeasurably beyond the reach of inductive observation. The

is not less a pyramid because it is the fact that in some cases part is wanting, or part superadded to the original building. Nor is the Bible less the inspired Word of God because some numerals may have fallen out, or may have been foisted in. If not genuine, these numerals may be, and they will be, all abandoned, without touching the integrity of the text and the plenary inspiration of the Bible. Mr Gliddon's studies appear, from his own references, to have been confined to such rationalists and sceptical writers as De Wette, Parker, Munk, &c. See Journal, No. 8, p. 354. No wonder, therefore, that he recognises no superhuman knowledge among the ancients (ibid. p. 385)—that he vehemently repudiates "any comparison between the physically harmless abominations of the Egyptians and those atrocities which hundreds of texts of Hebrew annals prove to have been quite common in Palestine, in the self-same days" (No. 9, p. 395)—that he gives to man an indefinite number of centuries prior to all recorded annals of his existence (No. 8, p. 357, and No. 10, pp. 406, 407), and that he "referred to this inscription in his first lecture, as an evidence that the ancient Egyptians believed in the immortality of the soul, although this dogma was unknown to the writers of the Hebrew Pentateuch. But see Munk's Palestine." Paris, 1845, pp. 147–150.—(See p. 291).

facts we cannot discover. Reasoning upon these facts, and conclusions founded on that reasoning, we cannot make. The appeal must be made, therefore, to testimony, and that testimony must be divine. And if this testimony exists, then our belief in the original unity of the human races is—like our belief in the certain immortality of the soul in a state of happiness or misery, in all the doctrines of the Bible, and in the original creation out of nothing of the earth itself—an exercise of faith, and not a conviction produced by science. For even as it is "through faith we understand that the worlds were framed by the word of God; so that the things which are seen were not made of things which do appear," (Heb. xi. 3), so through faith we believe also, that "God in the beginning made of one blood all the nations who now dwell upon the face of all the earth." In this view of the question, it is altogether independent of the speculations of science, the theories of the physiologist, the classifications of the naturalist, or the dreams of the ethnologist; and is, therefore, to be determined by the same rules of historical criticism which decide upon any and every other doctrine of the Bible. In this view also, the question is as evidently not about a matter of curiosity, but one in which the inspiration and truth of the Bible are involved, and which is pregnant therefore with inconceivably important results.

To the clear and certain establishment of the truth involved in this question, it is, therefore, essential that its twofold character should be borne in mind. So long as naturalists were agreed that unity of species argued unity of origin, the question might be regarded as single, and as one of exclusively a scientific character. But since the theory has been introduced and sanctioned by Professor Agassiz, that the same species may have been created in many different provinces, and throughout their whole extent, the question of origin must be regarded as entirely distinct from the question of specific unity. The former is a question of fact, to be decided by historical evidence. The latter is a question of

scientific observation and induction. The question of origin, therefore, can be determined only by the evidence of Scripture, history, tradition, language, religion, and the adaptations of Christianity to the mind and heart of all men; while the question of species is to be tested by those criteria which are employed to fix the classification of other animals.

There is thus an aspect in which the question of the unity of the human races may be viewed, distinct from the inquiry into origin, and in which it becomes a scientific inquiry; and that is, the question of fact regarding the present actual characteristics of the various races of men—the extent and nature of their differences—the possibility of accounting for them by natural and existing causes—the classification which these varieties require to be made of the races of men—whether all these races ought to be considered varieties of one species, or different species of one genus—and, finally, whether, in the case of any particular tribe of beings resembling man, such as the Dokos, &c., they are, or are not, to be admitted under the genus or the species homo, or are to be classed among some lower order. These, we apprehend, and these alone, are the scientific boundaries of this question. The only province to which science can direct its efforts in this inquiry, is the discovery of truth, by the sole use of our reasoning faculties in deducing laws and causes from the facts experimentally and veritably before us. In this view, all facts which come within the knowledge of our minds, whether by observation, experiment, or testimony—whether from the domain of history or philosophy—"all facts which," as Dr Morton says, "tend to establish analogies among men," are "evidently proper and necessary to the scientific determination of this question." A conclusion, therefore, cannot scientifically be arrived at in this inquiry by the testimony of anatomy alone, or of physiology alone, or of ethnography alone, or of history alone, or of experience and observation alone—but it can properly follow only from the examination of ALL the facts attested by ALL these sciences combined. The scientific, like the Scriptural

argument, is cumulative. It rests not upon any one line of proof, but upon every thing which bears upon the determination of the proposition that all the existing races of men possess—amid all their diversities, physical, intellectual, and moral—attributes which essentially belong to man, and which, at the same time, identify all men as belonging to one and the same species. Now, between these questions there need be, and there ought to be, no collision; since the infallible certainty of the single origin of the human races leaves the scientific investigation of their present specific character and classification altogether untrammelled, so that it might even be found convenient to regard as distinct species what are now considered as only varieties, and yet leave their unity of origin to be decided by its appropriate evidence—that is, by historical and scriptural testimony.

On this point, we cordially agree with Agassiz; since we believe that these two questions are entirely distinct in their whole nature, evidence, and treatment, and are therefore, scientifically considered, absolutely independent of each other. But it is on this very ground we withstand the learned professor, because he is to be blamed. As a naturalist, Professor Agassiz had only to do with the latter or scientific aspect of the question, and was in no way required to interfere with the former, or Scriptural question. We regard, therefore, his agitation of it as altogether gratuitous, and uncalled-for by any claims or requirements of science. The question of FACT might be examined, weighed, and discussed, upon the grounds of observation, experiment, and deduction; and the question of ORIGIN left to stand or fall upon its own merits. M. Agassiz, therefore, must have been very anxious for some reasons to give his views on the Scriptural relations of this question, when he embodied them in a paper on "The Distribution of Animals;" * and, to the amazement of every one, presented them before the American Association for the

* See in the Boston Christian Examiner and Review for April 1850, and the New Edinburgh Philosophical Journal for Jan. 1850.

Advancement of Science.* This course we regard as emphatically unscientific. The absolute independence of the different sciences is the great attainment of our age. Formerly, theologians undertook to decide scientific questions, and to interpret scientific facts. But now, the arrogance and the intolerance would seem to be changing sides; and scientific observers are to interpret and determine the nature of inspiration, and the actual teachings of the Bible. Formerly, the scientific world said to the church, Let us alone, and we will let you alone. But, having secured the non-interference of the church, they will not let it alone. They transcend the limits of their sphere and functions, and dogmatize upon that with which they have, as men of science, no concern. It was, indeed, a sorrowful spectacle, when true science was seen descending from her lofty heights, and, clothing herself in the weapons which had been forged in the armoury of infidelity by Voltaire, Peyrere, Rousseau, Paine, and such workmen, waged war upon that divine Word "against which no weapon shall ever prosper," nor even "the gates of hell prevail." How different was the spirit and language of the immortal Locke! "The Holy Scriptures are to me, and always will be, the constant guide of my assent; and I shall always hearken to them as containing infallible truth relating to things of the highest concernment. And where I want the evidence of things, there is yet ground enough for me to believe, because God has said it; and I shall presently condemn and quit any opinion of mine, as soon as I am shown that it is contrary to any revelation in the Holy Scripture." M. Agassiz also confounds altogether the Mosaic testimony respecting the central origin and dispersion of the human race, with its allusions to the lower animals, about whom, as we shall see, Scripture makes no definite statement which is not capable of interpretation in accordance with the facts of science. His disproof, therefore, of *one common centre of origin* for all the fauna and flora of the globe, in no way militates against the clear and frequent testimony of Scripture respecting the com-

* At its meeting in Charleston, in April 1850.

mon relation of all mankind to Adam and Christ. It is upon this common relation of all men to the first Adam, and to the second Adam, who is Christ, that the whole scheme of divine mercy is founded, and an interest in its unspeakable blessings offered to "every creature in all the world." And hence, in rejecting these facts, M. Agassiz will be regarded by the great body of the Christian world as overturning the very foundations of Christianity itself.

In this volume both these questions will be considered, and their lines of demarcation pointed out; but as the question of *origin* involves all that is important and essential in the inspiration of the Bible and the scheme of redemption, the determination of this point will be chiefly kept in view. We will, therefore, adopt the following plan. We will, in the first place, offer some presumptive arguments in favour of the unity of the human races. Secondly, we shall examine the historical and doctrinal evidences of Scripture. Thirdly, we shall take up the scientific argument in favour of the unity of the races, and examine especially the theory of Professor Agassiz. Fourthly, we shall endeavour to prove the unity of the races from the universality, nature, and connection of language. Fifthly, we shall endeavour to show that the unity of the races is sustained by the testimony of history and tradition. Sixthly, we shall examine how far the unity of the races can be proved from experience, from known changes which have occurred among the different races of men, from the insensible gradations of their varieties, and from their analogy to what takes place in other animals. After a resumé of our arguments, we shall then answer some objections, and show that the theory of a plural creation of distinct races is unphilosophical. Our argument, it will be perceived, is cumulative, and as it does not depend upon the cogency of any one line of proof, but upon the combined effect of all; so, on the other hand, the conclusion will not be weakened, if any one branch of the argument is deemed irrelevant or inconclusive, provided the others combine to render the unity of the human races Scripturally, reasonably, or scientifically true.

CHAPTER III.

PRESUMPTIVE ARGUMENTS IN FAVOUR OF THE UNITY OF THE HUMAN RACES.

Αστεα και δ' ἀλλως ἑνος ἁιματος ὡς λογος ἐστι.—ANTHOL. iii. 31, 6.

Nam a naturâ habemus omnes omnium gentium nullam aliam nisi humanam Deorum.—VELLEIUS.

WE will now proceed to offer some positive arguments for the unity of the human race.

To this doctrine, as taught in Scripture, there have been serious objections raised by some naturalists and medical men in recent times, who are not willing to admit the testimony of God. It is affirmed that God did not make all nations of men of one blood or parentage, but of *many*, and that the present inhabitants of the earth consist of *many* distinct and entirely separate species created in different localities, and having different endowments and destinies.

> "For, some philosophers of late here,
> Write, men have four legs by nature,
> And that 'tis custom makes them go
> Erroneously upon but two."*

We will, therefore, in the first place, present some reasons to show that the presumption is altogether in favour of the doctrine of the unity of the human races, and that it must, therefore, be received as true, until it is demonstrated that the present varieties of men did not arise from one original

* Butler's "Hudibras."

species, either through the agency of natural causes, or of supernatural causes, or of both combined.

We would, then, observe, *in the first place*, that the unity of the human races has been always regarded as A FACT established beyond all controversy. This general belief does not, we know, prove the truth and certainty of this doctrine, but it does create a strong presumption in favour of its truth. It makes it very probable that it is correct. And it throws the entire burden of proof that all men are not of one species, upon those who say that this established fact is not true. For if the oldest historical record that exists—and that by hundreds of years—unequivocally asserts that the whole earth was peopled by the descendants of one family, and if this truth has been generally admitted *in the face of all the apparent difficulties which now exist*, they who deny this fact must be able to produce incontestable evidence that it is not true. And when we find that no *such* evidence is attempted to be produced, and that the rejection of the doctrine of the unity of the races is based upon a few differences which always existed and were always known to exist, we must regard it as unreasonable, unphilosophical, and inadmissible.

We remark, *in the second place*, that this is a question on which Christians *of every denomination* agree. ALL varieties of Christian sects agree in regarding the unity of the human race as a doctrine of Scripture, and also as lying at the basis of Christian obligation and duty, since in this identity of man's nature, and the consequent closeness of his relationship, is laid the foundation of all social duties and affections. And as the preservation and happiness of man depends upon the duties involved in this common humanity, so it is true that man alone, of all other terrestrial animals, is found capable of recognising it. ALL Christians agree in representing God as "our Father," "all men as brethren," and Christ as "the Saviour of all men"—"the propitiation for our sins, and not for ours only, but also for the sins of the whole world." ALL agree in regarding it to be the duty of every human being to

"love the Lord their God with all their heart, and soul, and strength, and mind, and to love their neighbour"—that is, every other human being—"as themselves." ALL agree in considering that this doctrine affects both the truth, inspiration, and authority of Scripture, and also the entire nature, extent, and obligation of Christian duty. This inquiry, therefore, is both a religious and moral question, affecting equally our relations and obligations to God and to man.

Now the peculiar force of this concurrence of opinion will be at once perceived, when it is contrasted with the contrarieties of opinion existing among these different denominations, on other subjects connected with the statements and disclosures of revelation; and when it is remembered that the Koran, as well as the Bible, and Mohammedans, as well as Christians, agree on this point.* It makes it very certain that in the opinion of ALL those who receive the Bible, or even a portion of it, as an inspired communication from God, its authority is compromised, and its truth implicated, by the rejection of this doctrine of the unity of the human races. And inasmuch, therefore, as such momentous interests are at stake, they who advocate a theory which so directly conflicts with the word of God must be required to produce evidence as conclusive and overwhelming for their theory, as can be given for the infallible accuracy of the sacred Scriptures.

We do not affirm that a man cannot, in any sense, receive and adopt the Bible as a book containing, among its learned and traditionary records, *a revelation* from heaven, and yet deny the unity of the human race. But no man can deny this doctrine, while he receives the Bible as having been, IN ALL ITS CONTENTS, arranged, ordered, and directed by a superintending Wisdom, which either directly communicated its statements, or—when their truths were otherwise known—preserved the inspired writers from all error in their com-

* Among the signs by which God is known to his people, one is the "creation of the heavens and the earth, and the variety of languages and complexions."—Sale's Koran, vol. ii. p. 256.

pilation and presentation. Most certain it is, that this theory —by denying the truth and accuracy of the Bible in a particular tenet which is implied in all its doctrines and in all its duties—undermines altogether the authority of the Bible as an inspired book, and paves the way for that universal scepticism, to promote which the theory has been introduced and advocated in modern times by Rousseau, Voltaire, Peyrere, Nott, Drake, and the Ethnological Journal.*

We remark, *in the third place*, that the unity of the human race has been received as an established fact by many of the most learned and eminent men in EVERY department of scientific research bearing upon the investigation of the questions involved in the discussion.

It has been advocated by such SCHOLARS as Stanhope, Smith, Smellie, Wiseman, Chevalier Bunsen, Sir James Mackintosh, Sharon Turner, Goguet, The Encyclopedia Britannica, Rees' Cyclopedia, The Encyclopedia Americana, The Edinburgh Review, Bossuet, Berkeley, Captain Fitzroy, Faber, Archbishop Sumner, Boyle, Quetelet, Squier, Sir Walter Raleigh, The U. S. Exploring Expedition, Mills, The Encyclopedia Metropolitana, Brande's Encyclopedia,†

* See Lawrence's Lectures on Man, p. 176, and references. Goode's Book of Nature, vol. ii. p. 83; and Encycl. Brit., art. Peyrere. Drake's Book of the Indians, book i. ch. 1.

† On the Causes of the Variety of Complexion and Figure. &c.—Philosophy.—Lectures on Science and Religion.—See in Edinb. Rev. for 1849, Jan., art. Ethnology, pp. 83, 84; and Prichard's Nat. Hist. of Man, Dedication.—Hist. of Eng., vol. i. Introd. p. 4.—Sacred Hist. of the World.—The Origin of Laws, arts, and Sciences, vol. i. pp. 1-5.—Vol. ii. p. 134; and vol. vi. p. 274, &c.—Article, Man.—See Selections from vol. iv. p. 550, and a long article in favour of, in No. 3, for Jan. 1849, on Ethnology. —Universal History.—Alciphron, vol. ii. pp. 84, 85; 1732.—Early Migration of the Human Race, &c., by Capt. Fitzroy, R.N., and Gov. of New Zealand, vol. ii. p. 642, &c.—See Faber's Eight Dissertations, vol. ii. p. 288, &c.—Records of the Creation, vol. ii. p. 342, &c.—Encycl. Brit. vol. xvii. p. 78.—Treatise on Man, Edinb. ed., pp. 97, 123.—Ancient Monuments of the Mississippi Valley, p. 304.—Hist. of the World, in Wks., vol. ii. b. i. ch. 5, &c.—Vol. vi. pp. 117 and 194, as it regards all the Varieties of the Oceanic Tribes, by Hale.—Logic, p. 445, Am. ed.—Hist. and Biogr., vol. i. pp. 10, 11.—Of Art, Science, and Literature, p. 712. Col. 2. art. Man.

Faber, Stillingfleet, Somerville, Johnstone, and Sears. Locke, speaking of Genesis i. 26, says—" The whole species of man, who is the image of his Maker, has the dominion over the creatures." And in his great work, b. iii. ch. vi. § 4, he says—" Other creatures of my shape may be made with more and better, or fewer and worse faculties than I have; and others may have reason and sense in a shape and body very different from mine."

Dugald Stewart is also very strong. " The capacities of the human mind," he says, " have been in all ages the same, and the diversity of phenomena exhibited by our species is the result merely of the different circumstances in which men are placed." With him may be associated Sir William Hamilton.

The same view was advocated by Delafield, Catlin, Elias Boudinot, De Witt, Clinton, Franklin Smith, Robertson—who says, " We know, with infallible certainty, that all the human race sprung from one source"—by Bishop M'Ilvaine, Archbishop Whately, Murray, Wilford, Roberts, Hales, Bryant, Heeren, Lord Bacon, The Universal History, Michaelis,*

* Eight Disser., vol. ii. p. 319, and all his works.—Origines Sacræ.—Physical Geography, ch. 33, p. 436.—Physical Atlas, Ethnographic Divisions and Distribution of Mankind, p. 101.—Wonders of the World, 2nd series, ch. i.—Treatise on Government, in Wks., vol. ii. ch. xi., and vol. i. p. 269.—Prel. Dissert. to Encycl. Brit., p. 53.—Remarks on Dr Morton's Tables on the Size of the Brain, in New Edinb. Phil. Journal, Jan. 1850, p. 330, &c.—Antiquities of America, pp. 119, 120, 139, 140.—N. American Indians, vol. i. pp. 5, 8, &c.—Star in the West. Trenton, 1816, on the Amer. Aborigines.—Mem. of the Antiq. of the West of N.Y. Albany, 1818, pp. 9, 10.—The Origin of the Amer. Indians, in De Bow's Review. —Wks., vol. ix. pp. 269–294.—Introduction to Delafield's Antiquities. " In reference to the question," he says, " whether all the races of men have descended from one common stock, the antiquities of this continent are especially interesting, and may prove of very great value. It is a question, indeed, for ever settled by the researches of Bryant, Faber, and Sir William Jones."—Political Economy, ed. 3d, p. 108, and App. A., p. 243, where he quotes several, and all Lect. v.—Encyclop. of Geography, p. 255.—Asiatic Researches, vol. vi. p. 455.—C. M. R. A. S. &c. in Journal of Roy. Asiat. Soc., vol. ii. pp. 87–92.—Chronology.—Mythology and Truth of Christianity, p. 245, &c.—African Nations, vol. i. pp. 285, 286, &c.—Wks., vol. i. pp. 260, 269.—See vol. xviii. p. 248. *Ancient* Hist.—Spic. Parr., pp. 148, 5, and 7, in Nolan's Bampt. Lect. p. 498.

Vincent, The Edinburgh Encyclopedia, Madden, Calmet, Wells, Locke, Flourens, New Edinburgh Philosophical Journal, George Ross, Esq., Lord Brougham, John Shute Duncan, and Milner.*

The unity of the human races has been adopted by all the most eminent NATURALISTS—some of whom have been sceptics, and have been led to its admission solely by the weight of irresistible evidence. Among naturalists, we may name Linnæus, Ray, Denham, Buffon, Pennant, Schrebar, Ernleben, Forster, Shaw, Pallas, Cuvier, Fischar, Illiger, Humboldt, Blumenbach, Leichenbach, Lichtenstein, Turton, Sir Wm. Hooker, Professor Buckland, Camper, Zimmerman, Mudie, Lyell, Gmelin, De Guignes,† the French Academy of Science,‡

* Peripl. in Nolan's Bampt. Lect. p. 502.—Art. Mazzology, vol. xii. p. 555.—Preface to Poems, by a Negro of Cuba. London, 1840, p. 22.—Dictionary of the Bible, &c.—Geography of the Bible, vol. ii.—Wks. 4to, vol. i. p. 510, &c.—Annales des Sciences, t. 10, p. 361.—Vol. xxvii. p. 358, Oct. 1839.—Origin of Nations in Ethnol. Journal, No. 3.—Edn. of Paley's Nat. Theol.—Botanical Theology.—Descriptive Atlas. London, 1850, p. 112.

† Systema Naturæ.—Wisdom of God in the Creation.—Physico-Theology.—Nat. Hist. v. iii. pp. 443–446.—On Quadrupeds.—Seaugthiere.—Observations during Voyage round the World, ch. vi., § iii.—Geographische Geschicte, &c.—Glires.—Regni Animali.—Synopsis.—Prodromus.—Personal Travels, vol. ii. p. 565, and iii. p. 208.—De Gen. Hum. Var., p. 124.—Regni Animali.—Seaugthiere.—Nat. Theol. &c.—Rees' Cyclopedia, art. Hooker. — Geology, vol. i., ch. 2. — On the regular Gradation, in Lawrence, p. 358. — The Naturalist. — Physical Man. — Geology, vol. i. p. 230; and Second Visit to the United States, vol. i. pp. 105, 208, 282, 283. "Whatever may be their (the negroes') present inferiority as a race, some of them have already," &c.—Goode's Book of Nature, vol. ii. p. 70. —Ibid. p. 75.

‡ In their report we have an account of Blumenbach, in which they say, in reference to his first rule, "A profound gulf, without connection or passage, separates the human species from every other. There is no other species that is akin to the human, nor any genus whatever. The human race stands alone. Guided by the facial line, Camper drew a resemblance between the ourang-outang and negro. He regarded the form of the skull, which makes an apparent resemblance, but overlooked the capacity of the skull, which makes a real difference. In form, the skull of the negro is near the skull of the European. The capacity of these two skulls is precisely the same. But that which is far more essential, the brain, is the same—absolutely the same. And, besides, what animates the brain in this case? The human spirit is one

Audubon, Bachman, Guyot, Stark, Bushman, Mantell, Darwin, Pickering, and Professor Owen, who says, "he is not aware of any modification of form or size in the negro's brain, which would support an inference that the Ethiopian race would not profit by the same influences favouring mental and moral improvement, which have tended to elevate the primitively barbarous white races."*

"On the whole," says Buffon, "every circumstance concurs in proving that there was originally but one species." And it may be unhesitatingly affirmed that ALL NATURALISTS, who have described the genera and species of vertebrated races, have recorded their opinions in favour of the unity of the human race.

Many of the most eminent men in the MEDICAL profession have also adopted the opinion of the unity of the races, notwithstanding their perfect familiarity with all the differences disclosed by the scalpel and by comparative anatomy. Among these, we may mention Professor Owen, Sir John Richardson, Abernethy, Sir Charles Bell, Hunter, Lawrence, Prichard, Carpenter, Gardner, Moore, Combe, Godman, Rush, Goode, Tiedemann, Mitchell, Barrierre, Torrey, Davis, Physick,†

—the mind is one. In spite of its woes, the African race has had its heroes. M. Blumenbach, who has collected every thing which has honoured the race, estimated, as belonging to it, the most humane men and the bravest; also historians, savans, and poets. He had a library composed of books written by negroes."

* On the Unity of the Human Races.—The Earth and Man, pp. 239, 241, 242, 243, 244.—Elem. of Nat. Hist., vol. i. pp. 38, 39.—See Exploring Exped., vol. vi. p. 194.—Wonders of Geology, vol. i. p. 86.—Naturalist's Voyage.—On the Races of Men, p. 306, &c.—Quoted by Lyell in his Second Visit, vol. i. p. 105.

† Treatise on the Hand.—See Lawrence's Lectures, p. 180; and Brit. Encycl., vol. xvii. p. 78.—Lectures on Man.—Researches into the Physical History of Man, 5 vols. 8vo; Physical History of Man, vol. i. 8vo; Analysis of Egyptian Mythology, vol. i. royal 8vo; Origin of the Celtic Nations, 8vo.—Physiology.—Great Physician, pp. 91-93.—Power of Soul over the Body, and of the Body over the Mind.—Constitution of Man.—American Natural History, vol. i. Introduction.—Rees' Cyclopedia, Am. ed., to which he contributed.—Book of Nature, vol. ii. lect. iii., p. 8.—See his paper on the Brain of the Negro compared with the European and the Ourang-

Horner, Sir W. Ainslie, Arbuthnot, Falconer, Prout, Boerhave, De Haen, Lackey, Parsons, Swinton, S. L. Mitchell, M'Culloch, Paxton, Haller, Gmelin, Cartwright, M'Culloch, and Johannes Muller—one of the greatest anatomists of our age, says Humboldt—and Todd, with his numerous and learned associates. To these we must add the names of Dr John Charles Hall, and of Latham, and Wyman.

To these might be added also the great mass of living physicians in Great Britain and America; and Hamilton Smith allows that this is now the established doctrine of physiologists.*

Many of the most learned and celebrated ETHNOGRAPHERS and LINGUISTS have also adopted this opinion; such as the French Academy, Frederick Schlegel, Klaproth, Paravey, Merian, Humboldt, Herder, Count de Gebelin, Abel Remusat Niebuhr, in his later and maturer opinions, Adrien Balbe,†

Outang.—Professor of Anatomy and Physiology in the University of Heidelberg, and Member of the Royal Society.—Encycl. Brit., vol. xvi. p. 78.—Mosaic account confirmed by the Nat. Hist. of the Am. Aborigines in Bib. Repos., July 1833.—Ancient Monuments of the Mississippi Valley, p. 304.

* Observations on Atmospheric Influence, Moral as well as Physical, in five parts. By Sir W. Ainslie, M.D., M.R.A.S., F.R.S.E., in Journal of the Roy. Asiat. Soc. No. 3, vol. ii.—See on the Effect of Air on the Human Frame, ch. vi., xx.; in Ainslie, p. 58.—Falconer on Climate, pp. 123–152; in Ainslie, p. 58.—Chemistry, Meteorology, &c., b. ii.—See quoted in Lawrence, pp. 339, 340.—Ibid.—So. Editor of Delafield's Antiq. See p. 140.—Remains of Japhet. Lond. 1767.—Univ. Hist., vol. xx. pp. 162, 163.—Drake's Indians, p. 14.—Researches, Phil. and Antiq., concerning the Aboriginal Hist. of America. Balt. 1829; quoted in Drake, p. 15.—Member of the Royal College of Surgeons, London, in Paley's Nat. Theol., with plates and notes.—Proofs of the Attributes of God, from the Physical Universe, 3 vols. 8vo. Lond. 1837. See vol. iii. pp. 445, 453, 481, 489.—Physiol. des Menchen.—Cyclopedia of Anatomy and Physiology, as referred to.—Nat. Hist. of Man, pp. 144, 232.—Fellow of the Royal College of Physicians, Edinburgh, and author of Facts connected with the Animal Kingdom and Unity of our Species, and Analytical Synopsis of the Nat. Hist. of Man.—See on the Crania of Engé-ena, in New Ed. Phil. Jour., Jan. 1850, p. 273, &c.

† See Redford's Scripture Verified, p. 56.—Philosophisiche der Sprache und des Wortes in ibid., and Wiseman, p. 70.—Quoted in do., pp. 160, 161; and Wiseman's Lect., pp. 68, 69, 72.—Romische Geschichte, 3 Ausgabe, Jer. Th. s. 60. See do., 163.—Atlas Ethnographique du Globe. Eth. 1. See Wiseman, p. 76.

Laplace, Montulca, Delambre, Colebrook, Davis, Sir William Jones, Hamilton, Wilfort, Col. Tod and Heeren, Professor Vater, M. Duponceau, Von Spix and Von Martius, Grotius, Adelung, Carl Ritter, Johnes, Grimm, Count Goulianoff, and the Academy of St Petersburg, Sharon Turner, Bunsen, Le Brotonne, Hodgson, Daniell, Gallatin, Barrington, and Reischenberger.*

The enumeration we have made of names eminent in every branch of science bearing upon the unity of the human race, will show that a majority of those whose opinions are most entitled to weight, have adopted the opinion that the human races are of one species and of one origin. And this they have done while holding the most opposite opinions on religious subjects; some being sceptical, and others belonging to every variety of denomination. And this they have done also upon various grounds of conclusive evidence.

Now, against this array of testimony, given by those whose province, it is to judge rightly of the degree of evidence in a question of natural history and ethnography, who are our opponents? Dr Morton enumerates Virey, Borg de St Vincent, Barton. In addition, we give his own name and that of Professor Agassiz; Dr J. C. Warren, Professor Gibson, Dr B. H. Coates, to whom Dr Bachman adds Des Moulin and Broc. To these, Drake further adds the names of Voltaire, Lord

* Redford, pp. 178, 179, and quoted in proof of the chronology required by the theory of the unity.—In do., p. 187, and Encycl. Brit., vol. vi. p. 276.—Quoted in do., p. 188.—In Johne's Philological Proofs of the Original Unity and Recent Origin of the Human Races. Lond. 1843, p. 14.—Mithridates, vol. i.—In Johnes, p. 18.—In Encycl. Brit. vol. vi. p. 275.—Dr Wiseman's Lect., p. 68.—Transactions of the Royal Society of Literature, vol. i. pt. i.; Lond. 1827; pp. 17-106.—See Edinburgh Review, 1849, p. 77, &c. Am. ed.—Civilization, Primitive.—On the Berber Language in Tr. of Am. Phil. Soc., 1829.—See in Prichard, p. 612, 3d ed.—On the American Languages, &c.—This subject will be seen discussed in a comprehensive and interesting manner in Barrington's Treatise on Physical Geography. New York, 1850, pp. 294-310.—See a valuable presentation of the Unity of the Human Races, as founded on Natural History, in Reischenberger's Natural History, Elements of Mammalogy, pp. 28-31.

Kames, and Thomas Paine. And we may increase the list with the names of Lamarck, Mr Burke of the "Ethnological Journal," Mr Gliddon, and Dr Nott.

The argument founded on probability in favour of the unity of the human race, is therefore of such overwhelming power, that nothing short of clear and evident demonstration ought to overrule it.

We will only suggest, as a *fourth remark* in confirmation of this presumption for the unity of the human races, the fact, that all the world over, and in every age, men have practically acknowledged this unity by the amalgamation of all the various races of men; so that, at this moment, there is not, as we have seen, a pure and unmingled race on the face of the globe. Dr Morton has indeed laid it down as a fact, in relation, at least, to the negro race, that the same repugnance that exists in the different species of animals is also evidenced among the varieties of men; that "this repugnance is only partially overcome by centuries of proximity, and by the moral degradation consequent to the state of slavery." He adds, "Not only is this repugnance proverbial among all nations of the European stock among whom negroes have been introduced, but it appears to be equally natural to the Africans in their own country, towards such Europeans as have been thrown among them; for, with the former, a white skin is not more admired than a black one is with us."

"We could heartily wish," says Dr Bachman, whose language we will employ, "in behalf of good morals, that these views of our esteemed friend could be verified by our experience in regard to the two varieties to which he alludes. Charleston has, from time to time, received the majority of its male inhabitants from our Northern United States and Europe. Personal observation does not verify his assertion, that it requires centuries of proximity to remove this natural repugnance. On the contrary, the proofs are sufficiently evident, and to a melancholy extent, that if it existed on the day of their arrival here, it faded away, not after the lapse of cen-

turies, but in a very few days. In regard to the Europeans in their own country, this repugnance is even less than in the Northern States of America. In passing through the small village of Stratford, which recalls to the mind of all travellers the memory of the Bard of Avon, we observed on the steps of a neat cottage a well-dressed and rather pretty white woman, leaning on the shoulders of her husband, a full blood African. They were surrounded by their mulatto progeny. This family, we ascertained, was in terms of social intercourse with the neighbourhood. We also recollect having seen well-dressed young white men and women walking arm in arm with negroes in the streets of Edinburgh, London, and Paris. However revolting this sight may be to our American feelings, yet it did not appear to be regarded with the same repugnance by the communities in Europe. On the other hand, the repugnance of the African in his own country to the white man, may be the result of the jealousy of the former on account of the superiority of the latter ; but it is very evident that the white race has not only every where established its superiority over the African, but it has won its way to all manner of intercourse. Nor does this repugnance exist between the Caucasian, the Mongolian, and other varieties. There are in Russia whole regions of country where many races from the Caucasian, and some from the Mongolian, the descendants of the ancient Huns, have intermarried for ages, and they are so blended that it is difficult to trace their several origins. This admixture of two or more varieties does not, on the one hand, appear to have had a deteriorating effect on the Caucasian, and certainly elevates those whose remote origin can be traced to the Mongolian. In regard to the admixture of a superior with an inferior race in America, which in almost every case results in degradation and crime, it should be discountenanced by every lover of virtue, of good order, and of sound morality."

This presumptive argument we will conclude by giving the testimony of one of the most extensive and scientific travel-

lers of this or any other age—we mean Baron Humboldt. It is taken from his recent work entitled Cosmos.*

"Whilst attention was exclusively directed to the extremes of colour and of form, the result of the first vivid impressions, derived from the senses, was a tendency to view these differences as characteristics, not of mere varieties, but of originally distinct species. The permanence of certain types, in the midst of the most opposite influences, especially of climate, appeared to favour this view, notwithstanding the shortness of the time to which the historical evidence applied; but, in my opinion, more powerful reasons lend their weight to the other side of the question, and corroborate the unity of the human race. I refer to the many intermediate gradations of the tint of the skin, and the form of the skull, which have been made known to us by the rapid progress of geographical science in modern times; to the analogies derived from the history of varieties in animals, both domesticated and wild; and to the positive observations collected respecting the limits of fecundity in hybrids. The greater part of the supposed contrasts to which so much weight was formerly assigned, have disappeared before the laborious investigations of Tiedemann on the brain of negroes, and of Europeans, and the anatomical researches of Vrolik and Weber, on the form of the pelvis. When we take a general view of the dark-coloured African nations, on which the work of Prichard has thrown so much light, and when we compare them with the natives of the Australian Islands, and with the Papuas and Alfourous, we see that a black tint of skin, woolly hair, and negro features, are by no means invariably associated. So long as the Western nations were acquainted with only a small part of the earth's surface, partial views almost necessarily prevailed; tropical heat, and a black colour of the skin, appeared inseparable. 'The Ethiopians,' said the ancient tragic poet, Theodectes of Phaselis, 'by the near approach of the Sun-God in his course, have their bodies coloured with a dark sooty lustre,

* Vol. i. p. 351.

and their hair curled and crisped by his parching rays.' The campaigns of Alexander, in which so many subjects connected with physical geography were originally brought into notice, occasioned the first discussion on the problematical influence of climate on nations and races. 'Families of plants and animals,' says one of the greatest anatomists of our age, Johannes Müller, in his comprehensive work entitled 'Physiologie des Menschen,' 'in the course of their distribution over the surface of the earth, undergo modifications within limits prescribed to genera and species, which modifications are afterwards perpetuated organically in their descendants, forming types and varieties of the same species. The present races of animals have been produced by a concurrence of causes and conditions, internal as well as external, which it is impossible to follow in detail; but the most striking varieties are found in those families which are susceptible of the widest geographical extension. The different races of mankind are forms or varieties of a single species; their unions are fruitful, and the descendants from them are so likewise; whereas, if the races were distinct species of a genus, the descendants of mixed breeds would be unfruitful; but whether the existing races of men are descended from one, or from several primitive men, is a question not determined by experience.'

"Mankind are therefore distributed in varieties, which we are often accustomed to designate by the somewhat vague appellation of 'races.' . . . . . By maintaining the unity of the human species, we at the same time repel the cheerless assumption of superior and inferior races of men. There are families of nations more readily susceptible of culture, more highly civilized, more ennobled by mental cultivation than others; but not in themselves more noble. . . . . Deeply rooted in man's most inmost nature, as well as commanded by his highest tendencies, the full recognition of the bond of humanity, of the community of the whole human race, with the sentiments and sympathies which spring therefrom, becomes a leading principle in the history of man."

CHAPTER IV.

THE HISTORICAL AND DOCTRINAL EVIDENCE OF SCRIPTURE.

At verbum Dei nostri stat in secula, et hoc est verbum quod annuntio vobis.

THE unity of the human races, for which we "contend earnestly," is, as we have said, the identical origin of all mankind originally from Adam and Eve, and subsequently from Noah and his sons. In this aspect of the question it is, it must be admitted, fairly and legitimately a scriptural one. It is plainly beyond the discovery of reason. It lies in regions to which the clue of history offers no guide. It is immeasurably beyond the reach of inductive observation. The facts we cannot observe. Reasoning upon these facts, and conclusions founded on that reasoning, we cannot make. The appeal must be made, therefore, to testimony, and that testimony must be divine. And if this testimony exists, then our belief in the original unity of the human races is—like our belief in the certain immortality of the soul in a state of happiness or misery, in all the doctrines of the Bible, and in the original creation out of nothing of the earth itself—an exercise of faith, and not a conviction produced by science. For even as it is "through faith we understand that the worlds were framed by the word of God, so that things which are seen were not made of things which do appear" (Heb. xi. 3); so through faith we believe also, that "God in the beginning made of one blood all the nations who now dwell upon the face of all the earth." We deny also that the question, in

this aspect of it, can be rationally decided without a reference to the Bible. "Suppose even," to use the language of Dr Wardlaw, "that, on an extensive survey and a minute inspection of the various tribes of men on the surface of the globe, there are found, as is the case, appearances both for and against the ordinary belief of a common original stock. Suppose, if you will, the appearances on the two sides of the hypothesis to be even nearly on a balance, and to leave some little room for hesitation and scepticism. In this posture of the case, here is a document, which, in the most explicit terms, affirms the common origin, and which proceeds throughout upon the assumption of God's having 'made of one blood all nations of men to dwell on the face of the whole earth.' Without intending, in the least degree, to lay any interdict on philosophical investigation, to put a stop to the continued collection and comparison of facts, and the free and unembarrassed discussion of whatever these facts may seem to indicate, my simple affirmation is, that the authority of this document is fairly entitled to be examined upon the question; nay more, that it is not only so entitled, but that the man who professes to be actuated by a sincere desire to ascertain the truth, does not act consistently with his profession so long as he refuses or neglects such examination. I am not now assuming the authority of the document, and attempting to silence philosophy by an appeal to divine testimony; all I contend for is, that its claim to authority be fairly investigated, that the competency or incompetency of the witness be ascertained, that his pretensions be not set aside without inquiry. He may, on the one hand, be found unworthy of confidence, or, on the other, his deposition may be so attested as to render it credible, material, and even decisive. But whichsoever of these may be the result, the question at issue has not, we affirm, been fully, impartially, and in the true spirit of philosophy, investigated, if the pretensions of the witness be not candidly inquired into, and the credit due to his testimony correctly appreciated; and on this principle

the entire evidence, in all its variety, of the genuineness, the authenticity, and the divine inspiration of this document does come, not legitimately only, but imperatively and indispensably, within the range of investigation belonging to this question; there being nothing more pregnant with folly, than summarily to discard, without a deliberate and rigid examination of his character and credentials, any guide who promises to lead our steps to the oracle where doubts may be settled, and truth satisfactorily learned. One question in this investigation is, Has the human family proceeded from one centre and stock? Now, this is a question of historical evidence. Such evidence is admitted in the case of all other animals. Shall it be admitted in the case of man or not? Our opponents say, Not. We affirm, that it must, and that by all but infidels it will. If the Bible then is true—and has it yet been proved untrue?—the sole object of investigation comes to be the meaning of the language in which the intimations of the divine oracles are conveyed. It must come to this. The questioning of any of their discoveries, as contrary to reason, and inconsistent with otherwise ascertained principles of truth, is then out of place. It ought to have been introduced in the investigation of evidence. The present assumption is, that such investigation is over, and has terminated in the decision that the book is divine. In these circumstances, we must take high ground in behalf of revelation. Philosophy and theology stand in this respect on a widely different footing. The philosopher, as I have already said, having arrived at his conclusion, would, with all possible *sang froid*, leave it to the theologian to reconcile that conclusion with the dictates of his Bible. But on the supposition of this Bible having been ascertained to be from God—

'The sempiternal source of truth divine'—

we must not only modify, but precisely reverse this position, unless we would exalt the wisdom of the creature above that of the Creator. So far from its belonging to the divine to

harmonize the discoveries of this inspired document with the dogmata of the philosopher, it is incumbent on the philosopher, unless he can fairly meet and set aside the proofs of its inspiration, to bring his dogmata to the test of the document. What the divine has to do—and this we admit to be incumbent upon him—is to make good the authority of his standard; and having established this, to elicit with clearness its decisions. To insist upon its being his province to reconcile these decisions with the contrary decisions (if such there be) of the philosopher, would be to assert the superior decisiveness of philosophical conclusions to that of divine intimations. We should be unfaithful to our God, and throw a disparaging insult on his name, were we thus to consent that the wisdom of 'the Only Wise' should make its obeisance to the chair of human science; or were we to admit that he has left his Word with less conclusive evidence in its behalf, than that by which the wise men of this world can vindicate the dictates of their own sagacity."*

We will, therefore, in the first place, exhibit the teaching of Scripture upon this question, both doctrinally and historically, and present such general information as may be necessary to confirm its statements. By this course we hope to remove those prejudices which might hinder an impartial consideration of our subsequent argument for the unity of the races as the doctrine of reason and science, and to exhibit in the strongest light the twofold relation in which this subject stands to the Bible and to science, and the consequent necessity for keeping the investigation of these questions entirely separate and distinct.

In Acts xvii. 26, the apostle, addressing the Athenians, says:—"And God hath made of one blood all nations of men for to dwell on all the face of the earth, and hath determined the times before appointed, and the bounds of their habitation." Again, in Mark xvi. 15, 16, will be found recorded that remarkable command of our Saviour, "Go YE INTO ALL

* See "Christian Ethics," by Dr Wardlaw.

THE WORLD, and preach the gospel TO EVERY CREATURE. He that believeth and is baptized shall be saved; but he that believeth not shall be damned." (See also Matt. xxviii. 18–20.) Now, it will be at once apparent that there is a very close connection between the statement made by the apostle, and the command given by our Lord Jesus Christ; since it was only in obedience to this command the apostle went to Athens at all. There, amid the proud and conceited philosophers of Greece, in the centre of their resplendent capital, surrounded on every hand by their noblest works of art and their proudest monuments of learning, the apostle proclaimed the equality of ALL MEN, their common origin, guilt, and danger, and their universal obligations to receive and embrace the gospel. The Athenians, like other ancient nations, and like them, too, in opposition to their own mythology, regarded themselves as a peculiar and distinct race, created upon the very soil which they inhabited,* and as being pre-eminently elevated above the barbarians of the earth, as they regarded the other races of men. Paul, however, as an inspired and infallible teacher, authoritatively declares that "God who made the world and all things therein," "hath made of one blood," and caused to descend from one original pair, the whole species of men, who are now, by his providential direction, so propagated as to inhabit "all the face of the earth," having marked out, in his

* They also entertained the opinion that men sprung from some drops of sacred blood which fell down from Jupiter, and to which some think there is allusion, in Elsner Obs., vol. i. pp. 447, 448. Indeed every ancient nation was led, through pride and ignorance, to claim the same special origin as is indicated by the words αὐτοχθονες, aborigines and indigenæ. See numerous quotations in proof in Wetstein in N. T., vol. ii. pp. 569, 570. The Stoics and Epicureans believed men to have sprung from the tender soil of the new-formed earth, at that time infinitely more prolific. Men were produced, they thought, in myriads of little wombs, that rose like mole-hills over the surface of the ground, and were afterwards transformed, for his nourishment, into myriads of glandular and milky bulbs. This, and the theory that mankind was propagated by eternal generations, were the only theories current among the Grecian and Roman philosophers. See Goode's Book of Nature, vol. ii. p. 79, and Dr Wiseman's Lectures, pp. 95, 97. Amer. ed.

eternal and unerring counsel, the determinate periods for their inhabiting, and the boundaries of the regions they should inhabit.

In this passage of the book of Acts, the apostle refers very evidently to the record of the early colonization and settling of the earth which is contained in the books of Moses. Some Greek copies preserve only the word ἑνος, *i. e. one*, leaving out ἁιματος, *i. e. blood*—a reading which the Latin Vulgate follows. The Arabic version, to explain both these terms, has *ex homine*, or, as De Dieu renders it, *ex Adamo uno*—there being but the difference of one letter in the Eastern languages between *dam* and *adam*, the one denoting blood, and the other man. But if we take this passage as our more ordinary copies read it, ἐξ ἑνος ἁιματος, *i. e. of one blood*, it is still equally plain that the meaning of the apostle is not that all mankind were made of the same uniform matter, or in the same mould, as some have weakly imagined; for, on that ground, not only mankind, but the whole earth might be said to be *ex henos haimatos*, *i. e.* of the same blood, since all things in the world were at first formed out of the same matter. The word ἁιμα *i. e. blood*, must therefore be here rendered in the same sense as that in which it occurs in the best Greek authors—namely, *the stock out of which men come.* Thus, Homer says—

"Ει ἑτεον γ' ἑνος ἐστι και ἁιματος ἡμετεροιο·"

In like manner, those who are near relations are called by Sophocles οἱ προς ἁιματος. And hence the term *consanguinity* is employed to denote nearness of relation. Virgil uses *sanguis* in the same sense—

"Trojano e sanguine duci."

The apostle's meaning, therefore, is, that however men now are dispersed in their habitations, and however much they differ in language and customs from each other, they are all originally of the same stock, and derive their succession from the first man whom God created, that is, from Adam, from

whose name the Hebrew word for blood—*i. e. dam*—is a derivative.

Physiology supplies a remarkable proof of this declaration of Scripture. An examination into the formation and elementary nature of the blood discloses an essential similarity in the minutest corpuscles of all the races of men; and while, in some cases of extreme inanition, the transfusion of blood from any one man into the veins of another will restore and preserve life, it has been found that the transfusion of the blood of an animal of a different species proves fatal.* And if, therefore, it is established, as Professor Forbes and others prove, that animals of the same species were created in one centre, from which they have all been dispersed, then the original unity of all the races of men is proved both by the testimony of Scripture and by the positive evidence of physiological facts.

Neither can it be conceived on what account Adam in the Scripture is called "the first man," and said to be "made a living soul," and "of the earth earthy," unless it is to denote that he was absolutely the first of his kind, and was, therefore, designed to be the standard and measure of all the races of men. And hence, when our Saviour would trace up all things to the beginning, he illustrates his doctrine by quoting those words which were pronounced after Eve was formed—"But from the beginning of the creation, God made them male and female; for this cause shall a man leave father and mother and cleave unto his wife." Now, nothing can be more plain and incontrovertible than that those of whom these words were spoken, were the first male and female which were made in "the beginning of the creation." It is equally evident that these words were spoken of Adam and Eve: since of them it is recorded that

* See a paper published by Dr Blundell in the 9th vol. of the Medico-Chirurgical Transactions, p. 56. The celebrated French physiologists Prevost and Dumas have also written on the same subject very fully in the Bibliotheque Universelle, tom. xvii. p. 215.

"Adam said, this—*i.e.*, Eve—is now bone of my bone, and flesh of my flesh; therefore shall a man leave his father and his mother and shall cleave unto his wife." If the Scriptures, then, of the New Testament be true, it is most plain and evident that all mankind are descended from Adam and Eve.*

This humbling truth of the common origin and the natural equality of all men—humbling alike to the pride of lineage and of reason—the apostle, in the passage quoted, does not, it will be observed, attempt to *prove*. He gave the evidence of signs and wonders and divers miracles that he was commissioned by God to teach it, and that it was therefore to be received simply on the infallible authority of the Revealer. By this divine authority Paul and all other ministers of the gospel—and in their manner and measure every member of the Church of Christ—are commanded to go into ALL THE WORLD, and preach the gospel to EVERY CREATURE; that is, to men of every nation, and kindred, and tongue, and tribe, and people. "By one man's disobedience," says the same inspired teacher, "sin entered into the world, and death by sin, and so death passed upon all men, for that all have sinned." God, therefore, argues the apostle, seeing that ALL THE WORLD had become guilty before him, and having "so loved THE WORLD as to give his only begotten Son, that WHOSOEVER believeth on him might not perish but have everlasting life,"—now "commandeth ALL MEN EVERY WHERE to repent, because he hath appointed a day in which he will judge THE WORLD in righteousness by that Man whom he hath ordained; whereof he hath given assurance unto ALL MEN, in that he hath raised him from the dead."

It has, indeed, been said, that we might imagine God to

* Stillingfleet's Origines Sacræ, b. iii. ch. 4, pp. 498–502, where other arguments for a pre-Adamite race are answered. On the supposed fossil remains of pre-Adamites, see Mantell's and Lyell's Geology; Dr Scouler in Dr King on Geology and Religion, p. 388; Martin's Nat. Hist. of Man and Monkeys, pp. 332–337; and Cuvier, ibid. Also Hume's Essays.

have created any number of original and distinct families at different centres of population, from whom as many races of men have proceeded, and yet believe that all were made by God equally related to Adam—equally involved in guilt and corruption—equally exposed to danger—and equally interested in the provisions of the gospel.*

This supposition is, however, in every point of view, objectionable. As an hypothesis, it *creates* insuperable difficulties, and *removes* none. It involves that "throne," of which "justice and judgment are the habitation," in clouds and darkness, while it offers no solution of the problem to be solved. But it is not only an impeachment of the justice and the wisdom of God, it is in open contrariety to his Word. By that Word all men are declared to be sinners. (Rom. i.-iii.) By that Word misery and death are made, *in the case of men*, the penalty of sin. (Rom. vi. 23; and v. 12.)† By that Word it is declared that "in Adam all die," (1 Cor. xv. 22,) and that "by this one man's disobedience many were made sinners." (Rom. v. 19.) All those who are sinners, and who, as a consequence, die, were, therefore, as we are here taught, IN ADAM *virtually* as their natural root, and *representatively* as their covenant head. And hence Christ, in order to redeem men, was under the necessity of assuming the same Adamic human nature; while to do this without the sin in which that nature was involved, he was born of a virgin, but was at the same time conceived "by the power of the Holy Ghost." (Heb. ii. 11, 14; Luke i. 35; Matt. i. 18.) The Saviour is therefore called ἀνθρωπος Χριστος—THE MAN CHRIST JESUS—"THE SEED OF THE WOMAN." (Gen. iii. 15; Gal. iii. 19, &c.) He "became man." He is "Emmanuel, God with

* This is the theory of Dr Nott; of Drake in the Book of the Indians, b. i. ch. ii. p. 10; of Voltaire, Wks., vol. iv. p. 18; Essay on Manners, &c.; and Lawrence's Lect., p. 442, 8vo ed.

† See Dr Pye Smith on Scripture and Geology, Note A, pp. 361-375, 3d Eng. ed.

US." He is "the second Adam." "Both he that sanctifieth and they who are sanctified are all of one, for which cause he is not ashamed to call them brethren." "For as much then as the children are partakers of flesh and blood, he also himself likewise took part of the same." (Heb. ii. 11, 14.) The unity of the human race is absolutely necessary, therefore, to account for the present condition of human nature in consistency with the wisdom and justice of God, and also to render salvation possible to ANY human being.

This teaching of the New Testament on the subject of the unity of all the races of men—and which is implied also in the entire scheme of redemption, including man's fall and recovery—will be found to coincide with the whole tenor of the Old Testament Scriptures.

Here we are informed after God had made the heavens and the earth and every plant of the field, that as yet "THERE WAS NOT A MAN TO TILL THE GROUND." (Gen. ii. 5.) This is given as a reason for the creation of Adam and Eve, who were immediately placed in the garden of Eden to dress it and to keep it. Adam and Eve, therefore, were the first and only human beings at that time created by God—the only human beings then existing—and they and their children were the first agriculturists. (Gen. iii. 23; iv. 2, 9–20.)

Adam, we have seen, is expressly denominated "THE FIRST MAN," and it is said "he was made a living soul, of the earth earthy." (1 Cor. xv. 45, 47.) Now, in these words the apostle evidently refers to those employed by Moses, when he declares that "God breathed into man's nostrils the breath of life, and so he became a living soul." Adam was, therefore, the first of all men, and the model, type, or species after whom all are formed.

Of all the other animals, "GOD SAID, Let the waters bring forth," "and God CREATED every living creature;" but when man was to be produced, "the Elohim—the triune Jehovah

—said, Let US MAKE man—*Adam*, *mankind*—in our image, after our likeness, and let THEM—*the Adam or human race*—have dominion over ALL THE EARTH." (Gen. i. 26, 28; v. 1; ix. 6.) In all other animals, even the meanest, there is some *signum Dei vestigii*, some mark of God's power, but in man there is *signum imaginis*, something of real likeness in all the constituents of his physical, moral, and intellectual being. Like other animals, he is material and organized in his physical nature, but in man this structure is "fearfully and wonderfully made," paramount in beauty, and unlimited in its adaptation to every variety of occupation and enjoyment, and while

> "Pronaque cum spectant animalia cætera terram,
> Os homini sublime dedit, cælumque tueri
> Jussit, et erectos ad sidera tollere vultus."

Again, when Eve was created, she was called by God Adam. (Gen i. 26, v. 2; see also Numb. xxxi. 35 in Heb.)* This is therefore the proper name of the whole human race, and is so applied in Scripture. (Gen. ix. 6–9; James iii. 9; Ps. xi. 4.) The Arabic translates this passage (in Gen. v. 2) God "called them Adamites." All men, therefore, are the descendants of Adam, from whom they are called בני אדם, *beni Adam*, THE DESCENDANTS OF ADAM. (Deut. xxxii. 8; see Septuagint, and Gen. i. 5, 8, 10, 26; and v. 1.)

Again, Adam and Eve having sinned, their sin affected all mankind who were born in *their sinful* likeness after *their* (depraved) *image*—exposed to toil and sorrow, and finally to death itself. (Gen. iii. 15–24; v. 3.) The word Adam, as an appellative, thus came to signify the more degenerate and wicked portion of mankind. (Gen. vi. 2; Ps. xi. 4; xii. 1, 2, 8; and xiv. 2, &c.) In Adam therefore ALL DIE, and "so death has passed upon all men, because ALL HAVE SINNED" in Adam. (Rom. v.)

* See Harris's Man Primeval, p. 25. Amer. ed. See on the analogous classical usages of the same word, Kitto's Bib. Cycl., art. Man.

Once more, after the fall Adam called his wife EVE, or life, instead of woman (Gen. ii. 23), because God had graciously mitigated their deserved destruction, and had graciously promised to make EVE "the mother, or progenitor, of ALL that live"—"of all men in the world"—or, as the Chaldee translates it, "OF ALL THE SONS OF MAN," and pre-eminently of Christ, who is emphatically "THE LIFE." The Arabic translates this passage "because she (*i. e.* Eve) was the mother of every living rational animal." Similar are the versions of the Mauritanian Jews and the Persic of Tawasius.* As in Adam, therefore, all men die, so through this mercy shown to Adam all are permitted to live, for God even from the beginning declared, for the benefit of ALL MANKIND, that "the seed of the woman"—that is, a Saviour who, according to the flesh, should be born of her posterity, and of a virgin,—should bring eternal as well as temporal life to "ALL who should hereafter believe on him." And thus, as in Adam all men die, so in Christ all men may have life. (Gen. iii. 15; and Rom. v.)

Hence also we find that God is every where throughout Scripture represented as the common God, Creator, Preserver, Redeemer, and Judge of ALL MEN—"the God of the spirits of ALL FLESH"—in evident reference to these early records. (See Numb. xvi. 22; xxvii. 16; Job x. 12; xxvii. 3; Eccles. xii. 7; Isa. lii. 3, &c.)

It may be well here to notice the objection made to this whole record, founded on the impossibility of explaining its statements about the marriage and dominion of Cain, without supposing other races, and a greater multitude of men than it seems to imply, and upon which Agassiz, Amringe, Nott, and others, found their opinion, that an original diversity of races is taught in the Bible. This objection arises, we think, from overlooking the fact, that it is not the design of Moses to give us a particular account of the whole race of mankind descended from Adam, but only of those persons

* Selden De Jure Nat. et Gent. l. 1, c. 5, p. 65.

who were most remarkable, and whose history was necessary to be known, for the understanding of the succession down to his time. It will therefore be observed, that besides those that are particularly mentioned in Scripture, we are told, in general, that Adam "begat sons AND DAUGHTERS;" and if we will give credit to an ancient eastern tradition, he had in all thirty-three sons and twenty-seven daughters, which, considering the primitive fecundity of man, would in a short time be sufficient to stock all that part of the world where Adam dwelt.

According to the computation of most chronologers, it was in the hundred and twenty-ninth year of Adam's age that Abel was slain; for the Scripture says expressly that Seth (who was given in lieu of Abel) was born in the hundred and thirtieth year (very likely the year after the murder was committed), to be a comfort to his disconsolate parents.* Cain, therefore, must have been a hundred and twenty-nine years old when he abdicated his own country, at which time, on the most moderate calculation, there could not have been less than a hundred thousand souls of the Adamic race. For if the children of Israel—*from seventy persons*—in the space of a hundred and ten years became six hundred thousand fighting men (though great numbers of them had died during this time), we may very well suppose that the children of Adam, whose lives were so very long, might amount at least to a hundred thousand in a hundred and thirty years—that is, in five generations. Upon this supposition we may likewise find men enough to build and inhabit a city: especially considering that the word *hir*, which is rendered city, may denote no more than a number of cottages with some little hedge or ditch about them.† The natural increase of man is extremely rapid

* Compare Gen. iv. 17, 25, v. 3, and ch. i. and xi.

† Stackhouse's History of the Bible, b. 1, sect. 4. See also Dr Goode's Book of Nature, vol. ii. p. 85. Dr Wiseman's Lectures, pp. 92–94. Sumner's Records of Creation, vol. ii. p. 342. Encyclop. Britan., vol. xiv. p. 203. Sir Walter Raleigh's History of the World, b. i. ch. 5, sect. 3–5; in Wks. vol. ii. Oxf. ed.

when no hindrance is interposed. An island first occupied by a few shipwrecked English in 1589, and discovered by a Dutch vessel in 1667, is said to have been peopled *after eighty years* by 12,000 souls, all the descendants of four mothers.* When the Creator undertook to people a world, we may suppose that his providence arranged for this end, and no hindrance was allowed to interpose. It is believed that the death of Abel was the first which occurred in the family of man. It is not an unreasonable supposition, therefore, as figures will demonstrate, that the family of Adam embraced from 191,000 to 200,000 people at the banishment of Cain. How many of these adhered to the fortunes of Cain, from whom a large share descended, or whether any, we are not informed, nor are we told when he built his *city*. If he lived as long as his father Adam, and built it in the closing period of his life, his own descendants, born in the land of *Nod*, *i. e.* in the land of his *flight*, which the name denotes, were far more numerous than the numbers above mentioned would indicate. The same remarks will also apply to Nimrod. Though he may be, as is said by Dr Nott, but of "the second generation from Ham," there was abundant time for a population to have arisen on the earth, after the flood, sufficiently numerous to build cities and found kingdoms.† The city Cain built was not probably extraordinary for size, but at first, at least, a mere *stockade*, "*earth-work*," or "*fortress*."‡ Rome was not built in a day. It was once a hamlet or *blockhouse* on the Capitoline Mount. It was only the "beginning" of the kingdom founded by Nimrod, and the first foundations of Nineveh, Rehoboth, Calah, and Resen, of which the histo-

* Wiseman's Lectures, p. 145.

† See Bedford's Scripture Chronology, and his calculations of the population of the earth in each year from Noah to Abraham.

‡ "עִיר *Hir*, translated *city*," says Gesenius, "is properly *a place of watch or guard*," built with a wall or tower as a refuge of the keepers of flocks, an inclosure surrounded by a mound or wall, a nomadic *hamlet*, a *town*, a *city*, often not large, as there were 31 royal cities in Canaan, and 124 in the single tribe of Judah.

rian speaks. With Pittsburg, Cincinnati, Louisville, Lowell, Buffalo, and San Francisco before him, the growth of the present generation, it is surprising that Dr Nott cannot see that it requires but a brief time for places to which emigration tends, to rise to sudden wealth and eminence. Kingdoms, too, are often small in their beginning, which afterwards fill half the world with their arts and arms. Nor was it any more difficult for Cain to "get out of the presence of the Lord," than it is for unbelieving men to do so now. They now absent themselves voluntarily from the house and worship of God, and the society of his people, or having once been numbered among them, may be forcibly expelled.

It has also been alleged, that the fear of Cain, when God sentenced him to a life of wandering, lest he should be slain by those who met him (Gen. iv. 14), implies the existence at that time of other and numerous races of human beings. But if, as has been seen, the number of inhabitants was at this time great and necessarily very scattered, Cain might very well meet with some of them in his various wanderings. But Clericus has given the true interpretation of the words when he says, that "Cain designates the family of Adam which was now incensed against him." It was of these Cain was now justly afraid. He knew that by the law of nature and of God he deserved death, and that as all the inhabitants of the earth were connected with the murdered Abel, and outraged by his fratricidal death, he was every where exposed to their vengeance. And hence he appears to have doubted the fidelity even of his wife, who was doubtless one of Adam's daughters mentioned in chap. v. 4, and iv. 17, and to have taken up with some other woman of remoter consanguinity,* and to have retired to a distant country, not previously occupied, but called on this account Nod or Naid, which signifies a vagabond; that is, the land of the vagabond. Forsaking Adam's family and altar, and casting off all regard to the

* See Fuller on Genesis, p. 40.

worship and ordinances of God, as "the wicked fleeth when no man pursueth," he there in that land of trembling, as the words may also be rendered, became a prey to his own restless and torturing spirit, and the head of an apostate and ungodly race.

This view of the matter, which is plainly that of the Bible, receives confirmation from the traditionary tales of the Phœnicians concerning the enmity of the brothers Hypsuranios and Uson,—those of the Greeks about Apollo and the Atonement by blood,—and the story found among the Tschudi,* —and still further by the preservation in the family of Cain of names identical and similar to those of the family of Seth.†

Moses further assures us that the human family—as scientific analysis has been led to arrange its component members ‡ —is made up of the descendants of the three post-diluvian families. "The sons," he says, "of Noah that went forth from the ark, were Shem, Ham, and Japheth. These are the three sons of Noah, and of them was the whole earth (that is, all that is inhabited) overspread," or literally "scattered over." (Gen. ix. 18, 19.) On these three races a separate destiny was pronounced, God impressing upon them a moral and physical nature in accordance with the destiny to which each of them was appointed. The promise of extension was given to the race of Japheth—of religion to the progeny of Shem—and of servility to the descendants of Ham. Within the limits of this threefold destiny, this threefold race conveyed to their descendants those varieties of outward

* Sanchon. in Euseb. l. c. E. O. Müller, Prolegg., p. 304. Fr. Von Schlegel Philos. and Gesh. ii. p. 51, in Havernick's Introd. to the Pentateuch, p. 106.

† *E. g.*, the names of Chamoch, Lamech, Cainaan. See Havernick as above, p. 109. This also is the reason of the small number of names in use in the old world.

‡ See Prichard's Natural Hist. of Man, pp. 136-138. Hamilton Smith's Nat. Hist. of the Human Species, pp. 124, 125, 126, 129, 165, 184, and 284.

form and moral character which seem to be inseparably linked with their respective conditions.* The Japhethic race have occupied Asia and Europe. By the descendants of Shem, Judaism and Christianity have been established, and a corruption of both widely propagated in Mahommedanism and the Papacy; while from the posterity of Ham have proceeded all the nations of Africa—the servants of the other races—and the Canaanites, who were enslaved to the Israelites.† Of this prophecy of Noah, a writer in Kitto's Cyclopedia, says:—"That prophetic denunciation is the last recorded fact of the life of Noah, though he lived through the subsequent period of 350 years. It is a prophecy of the most remarkable character, having been delivered in the infancy of mankind; in its undeniable fulfilment reaching through 4000 years down to our own time; and being even now in a visible course of fulfilment."‡

The distribution of these three families over the whole earth was, as Moses further teaches, and as the apostle has already informed us, by divine allotment and choice; and it took place, as Moses intimates, in the days of Peleg—a name signifying division, "for in his days was the earth divided," or if we may Anglicize the Hebrew word, *pelegged.* (Gen. x. 25; xi. 9; and 1 Chron. i. 19.) This statement is repeated in Gen. x. 32, where it is said, "These are the families of the sons of Noah (according) to their generations in their nations; and from these the nations were dispersed in the earth after the flood." And again, in the 5th verse of the same chapter we are told, "From these the isles of the nations were dispersed in their lands, each (according) to its language, (according) to their families in the nations." § But still further, in Deut. xxxii. 8, 9, it is recorded—"In the

* See Triplicity, vol. i. p. 101—a work of much various and curious research.

† See Nolan's Bampton Lectures, l. 8. Well's Sacred Geography.

‡ Article Noah.

§ Kitto's Biblical Cyclopedia, vol. ii., p. 293. Eng. ed.

Most High's assigning abodes to the nations, in his dispersing the sons of Adam, he fixed boundaries to the peoples according to the number (more exactly *numeration*) of the sons of Israel: for the assigned portion of Jehovah is his people: Jacob the lot of his inheritance." Of this 8th verse the Septuagint translation is remarkable; and it thus became the source of extraordinary interpretations: "When the Most High apportioned nations, when he scattered abroad the sons of Adam, he fixed boundaries of nations according to the number of the angels of God."

Of the descendants of Ham we are specially informed, "These are the sons of Ham (according) to their tongues in their lands, in their nations." Of his sons or *tribes* thirty-one are given. These refused to abide by the allotment of God, and under the arch-rebel Nimrod, drove out Asshur and his sons, who had been located in the plains of Shinar. (Chap. x. 11.) At that time, it is recorded, all the earth was of one language (lip), and of one speech (words), that is, their language was the same or similar, "and Jehovah scattered them from thence upon the face of the whole earth"—(xi. 2, 9.) On this whole record, Sir William Jones remarks: "The most ancient history of the human race, and the oldest composition perhaps in the world, is a work in Hebrew: of which the initial portions (Gen. i.–xi.) are a preface to the oldest civil history now extant. We see the truth of them confirmed by antecedent reasoning, and by evidence in part highly probable, and in part certain; but the connection of the Mosaic history with that of the gospel by a chain of sublime predictions unquestionably ancient, and apparently fulfilled, must induce us to think the Hebrew narration more than human in its origin, and consequently true in every substantial part of it; though possibly expressed in figurative language. It is no longer probable only, but it is absolutely certain, that the whole race of man proceeded from Iran as from a centre, whence they migrated at first in three great colonies; and that those three branches grew from a common stock, which

had been miraculously preserved in a general convulsion and inundation of this globe." *

This division of the earth was probably made by Noah himself, in his prophetic and regal character, and under the immediate direction of Divine Providence. Epiphanius,† and also Eusebius, take particular notice of this distribution of the earth. ‡ "In the two thousand six hundred and seventy-second year of the creation, and in the nine hundred and thirtieth of Noah, did Noah divide the earth among his three sons." And as it is evident from the sacred record, that, in obedience to this decree the various families of these three progenitors went forth and took possession of their several lots, so we find that both the tripartite allotment and the quiet concurrence of the parties therein, are particularly alluded to by heathen writers. Thus, in the hymn of Callimachus in Jovem., v. 61, it is said,

> "By lot tripartite each of Cronus' sons
> Took up his several realm." §

Homer, says Bryant, "introduces Neptune speaking to the same purpose." ‖

> "We are from Cronus and from Rhea sprung,
> Three brothers; who the world have parted out
> Into three lots: and each enjoys his share."

This tradition probably came from Egypt to Greece; and is therefore more fully related by Plato. In his Critias, he says, "The gods of old obtained dominion of the whole earth, according to their different allotments. This was effected without any contention, for they took possession of their provinces in an amicable and fair way by lot." ¶

The same triple division of the earth is noticed in a frag-

* Wks., vol. iii., pp. 191–196. 8vo ed. † Oper. v. ii. p. 703.

‡ Euseb. Chron. p. 10.

§ Cronus in his post-diluvian character is certainly Noah. See Faber's Origin of Pag. Idol., vol. iii. p. 468.

‖ Il. O. v. 147.

¶ See Bryant's Ant. Myth. v. iv. p. 20.

ment of the Chaldaic or Persic oracles of Zoroaster, where it is added that the division was ordained by the Nous or intelligence of the father, *i. e.* by Nous, or Nuh, or Menes, or Noah.* Menes, the progenitor of the Egyptians, was also Noah, it being recorded of him that he bound the ark to the peak of Hinravshu.† Noah was also the Fohi of the Chinese.‡ From this triple division originated also the three worlds of the Hindu and the Rabbinical mythology.§ Hence also, as Faber believes, originated the various Triads of Paganism, who appear at the dissolution of every former world for the purpose of replenishing and governing it, as among the Hindoos, the Buddhists, the Jainists, the Chinese, the Tartars, the Peruvians, the Persians, the Syrians, the Egyptians, the Greeks and Romans, the Canaanites, the Goths, the Celts, the Orphic Pythagorean and Platonic schools, in the Orphic theology, and in the South Sea Islands.‖ The great gods of the Gentiles were also deified mortals, consisting of a father and three sons, and were acknowledged at once to be gods and ancestors, while the great mother of the goddesses multiplied herself into three daughters.¶ This argument Mr Faber pursues at great length, by an illustration of the primitive dominion secured by Nimrod and his Cushites over their brethren, as manifested in the existence of distinct castes or races, and in other customs found among nations in every quarter of the globe.**

We will only add, on this part of the argument, the testimony of Mr Murray.†† "That the three sons of Noah," says this writer, "overspread and peopled the whole earth, is

* Stanley's Chaldee Phil. p. 41. Faber Orig. of Idolatry, 468, vol. iii.

† Hamilton Smith, &c. P. 357.

‡ Anct. Univ. Hist. Vol. i. p. 261, &c.

§ Moore's Hind. Panth. pp. 40, 104.

‖ See the authorities given by Faber on Idolatry, vol. iii. pp. 469, 471, and at length previously.

¶ Ibid. pp. 471 and 474.

** See the authorities given by Faber, vol. iii. pp. 475–498.

†† Encycl. of Geog., p. 255.

so expressly stated in Scripture, that had we not to argue against those who unfortunately disbelieve such evidence, we might here stop; let us, however, inquire how far the truth of this declaration is substantiated by other considerations. Enough has been said to show that there is a curious, if not a remarkable analogy between the predictions of Noah on the future descendants of his three sons, and the actual state of those races which are generally supposed to have sprung from them. It may here be again remarked, that to render the subject more clear, we have adopted the quinary arrangement of Professor Blumenbach; yet that Cuvier and other learned physiologists are of opinion that the primary varieties of the human form are more properly but three, viz., the Caucasian, Mongolian, and Ethiopian. This number corresponds with that of Noah's sons. Assigning, therefore, the Mongolian race to Japheth, and the Ethiopian to Ham, the Caucasian, the noblest race, will belong to Shem, the third son of Noah, himself descended from Seth, the third son of Adam. That the primary distinctions of the human varieties are but *three*, has been further maintained by the erudite Prichard, who, while he rejects the nomenclature both of Blumenbach and Cuvier, as implying absolute divisions, arranges the leading varieties of the human skull under three sections, differing from those of Cuvier only by name. That the three sons of Noah who were to "replenish the earth," and on whose progeny very opposite destinies were pronounced, should give birth to different races, is what might reasonably be conjectured. But that the observation of those who do, and of those who do not, believe the Mosaic history, should tend to confirm truth, by pointing out in what these three races do actually differ both physically and morally, is, to say the least, a singular coincidence. It amounts, in short, to a presumptive evidence, that a mysterious and very beautiful analogy pervades throughout, and teaches us to look beyond natural causes in attempting to account for effects apparently interwoven in the plans of Omnipotence."

CHAPTER V.

THE HISTORICAL AND DOCTRINAL EVIDENCE OF SCRIPTURE—CONTINUED.

"*Let the professed phenomena of Zoology be admitted only so far as the facts and inferences have had shed on them the light of clear undoubted testimony, and let the Records of Inspiration be likewise freed from the peculiarities of accidental interpretations, and viewed only in their pristine genuine characters; and the harmony between what God has done, and what God has said, can then never long be doubtful.*"

We might here close our illustration of the historical and doctrinal evidence of Scripture, to the original unity of the human races, as being all descended from the same parents. But as the advocates for a plurality of originally created races of men have claimed to rest their theory on some statements contained in the book of Genesis, we shall proceed to examine these boldly-asseverated allegations distinctly.*

* "It is," says the Christian Register of Boston, "the primer, not Moses, that says dogmatically that Adam was *the* first man. He may have been, for all that we are told to the contrary, only *a* first man, *one* of the world-fathers. Moses may have designed simply to give, subsequently to his cosmogony, the history of that portion of the race from which his own nation derived their origin. Nor is the race any the less one, if not the descendants of a single human pair. It is not as Adam's, but as God's children, that we are brethren in Christ. A common Father and a common redemption make the whole family in heaven and earth one. Nor does any Christian look this side of God and Jesus for his motives to universal philanthropy. The declaration, 'The field is the world,' and the command, 'Preach the gospel to every creature,' are enough to consummate the essential unity of the race, even if every continent and island had its separate Adam."

I. And in the first place, it is said, that the record found in the book of Genesis has reference only to the ancestors of the Sacred, or Jewish, or Caucasian race. This, however, cannot be the case—

1. Because our opponents affirm that there are in this very record intimations of more than this one race, and they cannot both affirm and deny the same proposition.

2. Because many other nations proceeded from the stock here referred to. Among the descendants of Shem, Ham, and Japheth, there are found many of the greatest varieties of men, both as it regards colour, stature, structure, physiognomy, character, and civilization.*

3. The actual varieties found to have arisen among men of *the same stock*, as in Ireland, England, and in Europe generally, are just as hard to be accounted for as the origin of all existing varieties from one original stock. The explanation of the *varieties* will also account for the origin of races.

4. It is here expressly said that Adam called his wife "the mother of all living," that is, of all the kind—of all human beings—of all the sons of men—and therefore of all the races of mankind.

5. Our Saviour traces ALL mankind up to this same original stock. "Adam said (Gen. ii. 23, 24), This is now bone of my bone, and flesh of my flesh; she shall be called woman, because she was taken out of man. Therefore shall a man leave his father and his mother, and shall cleave unto his wife, and they shall be one flesh." Now in reference to this passage, our Saviour says (Mark x. 6, 7), "But from the beginning of the creation, God made them"—that is, Adam, or mankind, or every man—"male and female. For this cause shall *a man* leave his father and mother, and cleave to his wife." The reference in both cases is therefore evidently to all the races of men.

6. The New Testament every where expressly teaches that

* See S. Presb. Rev., January 1850, pp. 473, 474; and Stillingfleet's Orig. Sacræ, b. iii. ch. iv. p. 499, &c.

God "hath made of one blood all nations of men for to dwell on all the face of the earth, and hath determined the times before appointed, and the bounds of their habitation; that they should seek the Lord, if haply they might feel after him, and find him, though he be not far from every one of us." (Acts xvii. 26, 27.)

7. The name *Adam*, employed in Genesis to designate man, is "the generic name of the human species."* "Among the Jews," says Rosenmüller, "this was the generic name of the whole species," and used only "*singularly* for the first man (as in Gen. i. 27), or *collectively* (as in ver. 26 and 28), WHERE IT MUST BE REFERRED TO THE WHOLE HUMAN RACE."† As an adjective, the word Adam refers not to colour, but to origin, to the earth (which may be red, black, or sandy) out of which man was made.‡

8. The specific attributes here given to man are those, not of any one race of men, but of the whole human family.

(*a.*) Man was created by the special counsel, co-operation, and agency of the entire Godhead in its plural—that is, in its triune—character. (Gen. i. 26 and 27.) It is, therefore, at once inadmissible, unphilosophical, and profane, to introduce such a mysterious interposition of the Godhead for such an indefinite number of times as these theorists in question may choose to imagine.§ The multiplication of causes beyond what is *absolutely necessary* to account for the effects, is in all cases unscientific. But in a case so supernatural, solemn, and mysterious as this, it is impiety as well as absurdity.

(*b.*) Man was created in the image or likeness of God. (Gen. i. 26, v. 1, ix. 6.) This may import, and in a figurative sense refer to, the majesty of man's countenance, his erect

* See the Sacred Scriptures in Heb. and English, by De Sola and Lindenthal, two eminent Jews. London, A.M. 5664, or A.D. 1846, p. 4.

† See Scholia in Genesin, Lipsiæ, tom. i. p. 82, where are given many learned authorities.

‡ See De Sola, ibid., p. 5, n. 7, and Rosenmüller, ibid., and Gen. ii. 7.

§ See Calvin in loco.

stature, and his other pre-eminent endowments. It has, however, special allusion to the soul of man, which in its nature is spiritual, invisible, and immortal—which possesses the *powers* of reason, understanding, and will—and to which were imparted knowledge, righteousness, and true holiness. (Eph. iv. 24.) Man's nature possesses in itself all that is beautiful in inanimate nature, the life and growth of plants, the higher powers of beasts, the reason and wisdom of angels, and the moral lineaments of Deity. It is thus עולם הקטן, *olam hakaton*, as the Hebrews denominate man, or a *microcosmos*, or miniature of the world, as he is called by the Greeks. This image of God in man is seen also in its effects, in that dominion over the earth and all its animals by which all are made to co-operate for the supply of man's wants, and for the increase of man's comfort. (Gen. i. 28, &c.) "The plural number," used in this grant to man, intimates, says Calvin, "that this authority was not given to Adam only, but to all his posterity as well as to him. And hence we might infer what was the end for which all things were created; namely, that none of the conveniences and necessaries of life might be wanting to men."

Now, in all these characteristics of man, which form his specific character, and upon which the constancy of species depends, all men are essentially alike, so far as this image is retained by any of the sons of men.*

(*c.*) But we are further told, in this book of Genesis, after the record of the sin and fall of man, that "Adam begat a son in his own likeness after his image;"† that is, all who have descended from him are born in that mortal, sorrowful, and sinful condition into which sin has plunged mankind bodily, mentally, and spiritually. The present characteristic image of all the Adamic race of man, therefore, is one of deceitfulness and sin. And as in this image all men of every race are naturally alike, they are all of the same origin.

* See Kitto's Daily Bible Illustrations.

† Gen. v. 3; see De Sola, &c.

This point is fully and frequently enforced in the New Testament.*

The Adam referred to in the book of Genesis, therefore, must be the original stock of ALL the races of men, and not of any one only.

9. This appears further from the promise made to Adam and his posterity of a Redeemer. (Gen. iii. 15.) *Those to whom* this Redeemer is promised, are only such as are of "the seed of the woman," "of one blood" with her, and her posterity, therefore, by natural generation. No others, as the apostle argues, are included. (Rom. v., &c.) The Redeemer, who is here promised to this posterity of Adam, was also to be of "the seed of the woman," that is, "according to the flesh." The incarnate Redeemer was therefore to be "born of a woman"—of a virgin—and of the seed of Eve. This is the reason why in the New Testament the descent of Christ *as man* is traced from Adam to Joseph,—why he is called "the second Adam," "our kinsman,"—and why "he became flesh," and "took our nature upon him." (See Isaiah liii., &c.)

All the races of men, therefore, who are interested in Christ and in his gospel are and must be of Adamic origin, seed, or blood. All to whom that gospel is to be sent must also of necessity be of the same stock. And hence, as it is expressly commanded to preach this gospel to EVERY CREATURE IN ALL THE WORLD, all must be of the same original Adamic family and origin.

10. Finally, all the languages and traditions of all the races of men preserve more or less fully a reference to the facts recorded in the book of Genesis. And as all these tribes of men could never have originated these identical statements, they prove, beyond doubt, their primitive unity in origin and in knowledge.†

* See Rom. ch. iii., and v., &c.

† See our chapter on this subject, and see also many remarkable proofs of reference to this record from classic writers, with authorities, in Rosenmüller, as above, pp. 84 and 85.

II. But it is further alleged by our opponents, that this early record of man's history is plainly composed of different productions, and refers to the creation and history of different races.

On this objection we remark—

1. That it contradicts the previous argument, inasmuch as it would show that the Biblical record is not confined to one single race of men, but to several.

2. There is no proof that this record is made up of several distinct and different documents. "To our minds there is a perfect unity of design pervading the book of Genesis, no undue repetition, and no confusion. Viewed in a merely literary aspect, it is the most venerable monument of antiquity; in a historic or ethnographic light, the most valuable and satisfactory document in existence; and as a portion of the infallible rule of faith and practice for man, the foundation-stone on which the whole edifice of revelation is built. Truly a writer may retrace his steps and enlarge his description for important reasons, without being charged with discrepancy. He is little versed in classic literature, whose mind does not recur to similar instances in the most trustworthy and polished writers of antiquity. And the oriental style resumes and repeats more than that of the west." *

3. "If it could be *proved* that Genesis has, in part, been compiled from pre-existing documents, its inspiration would not fall away. These may have been written by patriarchs before Moses, to whom God revealed his will; or if the inspired Moses incorporated them into his writings, they have received, in each word and letter, the sanction of the Spirit of God speaking in him."

"In the writing of the Scriptures there were two agents employed—the Spirit of God, the true Author of the whole, and man, acted upon by the Spirit, and speaking as he was moved by the Holy Ghost. All Scripture, therefore, is given

* See on this point the able work of Havernick—Introduction to the Pentateuch, pp. 48-90, 93, 95, 100, 101, 104, 106, 110, 115, 116, 126, &c.

by inspiration of God. The men acted on by the Spirit were acted upon as free and intelligent agents, and not as unconscious and senseless tools, and the peculiarities of their genius and previous culture were not lost from the writings which, under this celestial impulse, they produced."

Whether, therefore, this record was originally suggested by direct inspiration, or whether it was formed under divine guidance from many existing traditionary materials, it was "ALL given by inspiration." It is ALL the Word of God, and when properly understood and explained "by the other Scriptures," it is ALL infallibly and immutably certain.

4. This record, we further affirm, does not refer to the creation of different races of men. It has indeed been affirmed, that when it is said that "male and female, God created THEM," there is a reference to more creations than one. This is too puerile an objection to notice, and yet it is not beneath learned editors when the truth of a favourite theory is in question. The original words are, "A male and A female created he them." God did not, therefore, create several males in several places, nor several females, but only one male and one female, who together constitute *man*, *Adam*, the generic parentage of the human species. This interpretation is in accordance with a Hebrew rule, by which a thing thus singularly expressed is limited emphatically to one. (See 1 Chron. xvi. 3; 2 Sam. vi. 19; Deut. vi. 13; Matt. iv. 10.) In this passage, therefore, we are taught that God created one male and then one female, as the original stock of the whole human family.

5. But again, if the passage in Genesis, chapter second, &c., records the creation of a different race of men from that alluded to in chapter first, then the heavens and the earth, and every thing else which is declared in the first chapter to have been created, must also have been different from those referred to in the second. "The earth," spoken of in the first chapter of Genesis, may just as well mean Palestine, or any other limited portion of the globe, as in the second; and the animals

and vegetables said to be created at the one period, may just as well be considered partial and territorial as in the other. But the creation referred to in both chapters must be the same, because all things that were created are declared to have been created within six days. The work of creation was then completed, and on the seventh day God rested from all his works. The record in chapter second is, therefore, plainly, according to oriental style, a recapitulation and expansion of that in chapter first, since an opposite conclusion is contrary to the records themselves, and involves inconceivable absurdities.

6. Again, Adam must have been aware of any previous or contemporaneous creation of races of men had it taken place. When, therefore, he calls his wife Eve, *because she was the mother of all living men*, we have his testimony, and in the sanction given to his opinion by God himself in every part of the Bible, we have the testimony of God also, to the single origin of the whole human family.*

7. Equally certain is it that the fact of the plural creation and existence of other races of men than the Adamic, must —if a fact—have been known by personal knowledge and indubitable tradition to Noah, Abraham, and Moses. Their sanction, therefore, of the record as it exists, is proof positive that no such races ever existed. And when we consider that Moses has left incontestable evidences of his inspiration and divine legation, we must regard the doctrine of the unity of the races of men as stamped with the seal of divine authority.

It is indeed affirmed that Adam was only "A FIRST MAN," and not "THE FIRST MAN," and that it is "the primer and not the Bible which teaches the contrary."† But surely this apo-

* Adam had previously called her *Isha*, the feminine of *Ish*, or man, *i. e. vira*, whence virago, contracted *virgin*, and also *womb-man* or woman. The phrase "was the mother" is equivalent to "was to be the mother," *i. e.* the natural mother of all mankind.

† Christian Register in N. Y. Herald, for April 29, 1850, and the Union of Washington, for May 17, 1850.

logist for error had forgotten that the apostle, quite as peremptorily as the primer, twice, and very emphatically, calls Adam "THE FIRST MAN ADAM," ὁ πρῶτος ἄνθρωπος Ἀδαμ (1 Cor. xv. 45, and again v. 47); that is, the first representative and head of humanity. Christ also, as the only other representative head of humanity, the apostle calls "THE SECOND ADAM." Adam, therefore, was the first, and at that time the only existing human being.

It is also said,* that we have evidence of different races of men contemporaneous with the Adamic race, in the statement of Moses respecting "the sons of God" and "the daughters of men." (Gen. xi.) To prevent the intermixture and corruption of these different races, the present variations in form, colour, &c., were, it is alleged, introduced. Every biblical scholar, however, knows, that by the terms "sons of God," or as the Chaldee renders them, "the eminent ones," is to be understood the descendants of Seth, Enos, and the other pious patriarchs who were separated from the posterity of Cain and formed into the visible church. The same persons, therefore, are "called by the name of the Lord," (see Gen. iv. 26), while all others are merely termed "*men*," and their daughters "the daughters of men." (See 1 Cor. xii. 3.) These latter men, in allusion to their cruelty, rapine, and violence, were also denominated "*giants*," (Gen. vi. 4), *i. e.* fallers or *apostates*. The book of Genesis, therefore, has undoubtedly no reference to any other than the Adamic race of men.†

8. But it is said in reply, that all other animals, like plants, are found to have been created in separate and limited regions, to which they are adapted and confined, and that it would be anomalous to suppose man to have been created and distributed on a different plan. In reply we observe:—

(*a*) This record of the creation of all things, and that after-

* Amringe's Nat. Hist. of Man.

† See Bush on Genesis, in loco.

wards given of the flood, as we shall hereafter show, in no way requires us to suppose that animals and plants were created in pairs, or in one central location, from which all the earth was supplied.*

(*b*) This record distinctly teaches us, that there is as great a difference between the plan followed in the *creation* and *dispersion* of man and of the lower animals, as there is between their comparative dignity and elevation in the scale of being. All the other animals, and the flora also, were adapted to man, for whose use they were made. "I will even go farther," says Guyot,† "than is ordinarily done, and I will say, that there is an impassable chasm between the mineral and the plant, between the plant and the animal; an impassable chasm between the animal and the man; and it is correct to say, that inorganic nature is made for organized nature, and the whole globe for man, as both are made for God, the origin and end of all things." Man is the end and the head of all. He is pre-eminent above all, and he is, therefore, AN EXCEPTION TO ALL THE REST OF THE CREATION, as Professor Agassiz well and truly states his position. "Accordingly," to use the words of Stillingfleet, "in the production of beasts we read, 'Let the earth bring forth the living creature after his kind, cattle, and every creeping thing, and beast of the earth after his kind: and it was so.' But in the production of man it was said, 'Let us make man in our own likeness.' From hence I observe this difference between the production of animals and of man, that in the one God gave a prolific power to the earth and waters for the production of the several living creatures which came from them; so that the seminal principles of them were contained in the matter out of which they were produced, which was otherwise in man, who was made a peculiar being by the hands of the great Creator

* See Havernick, pp. 111, 112. See fully illustrated and proved as long since as 1670, by Stillingfleet, in his Origines Sacræ, b. iii. ch. and sect. 4, p. 504, &c.

† Earth and Man, p. 11.

himself, who thence is said to have formed man of the dust of the ground."

The same divine purpose is seen in the peculiar blessing and security imparted by God to the human family, by which, whilst they were made productive beyond all merely natural increase, the highest moral benefits were at the same time secured. There is therefore every reason, as Bishop Cumberland supposes, for believing that Eve and her daughters, who are alluded to in Genesis, were fruitful beyond all subsequent experience, and that at the period of Abel's death, that is about A.M. 130, the population of the earth had multiplied to the amount of several hundred thousands.*

"The blessing of God," says Calvin,† "may be regarded as the source from which the human race has flowed. And we must consider it not only with reference to the whole, but also, as they say, in every particular instance. For we are fruitful or barren in respect of offspring, as God imparts his power to some, and withholds it from others. But here Moses would simply declare that Adam with his wife was formed for the production of offspring, in order that men might replenish the earth. God could himself indeed have covered the earth with a multitude of men, but it was his will that we should proceed from one fountain, in order that our desires of mutual concord might be greater, and each might the more freely embrace the other as his own flesh." How should we all despair, if the words "OUR FATHER," did not express the truth that we all participate in the blessings, as well as in the curses, of the whole race; if these were words merely, and not the expression of an eternal truth; if God were not that One Being eternal, immutable, invisible, to whom ALL may look up together, into whose presence a way is opened for ALL; whose presence is that true home which the spirits of men were ever seeking, and could not find,

* See, in addition to our consideration of this subject, Kitto's Daily Bible Illustrations, pp. 79–82.

† Comment on Gen. i. 28.

till He who had borne their sorrows and died their death entered within the veil, having obtained eternal redemption for them, and bade them sit in heavenly places in Christ Jesus! *

"These objections are all brought forward to show that the book of Genesis is unworthy of credit, and that, therefore its ethnology is to be rejected. 'Its ethnological details,' says Dr Nott, 'are devoid of all harmony, are inconsistent with each other, and contradicted by the early history of Egypt, China, India, and America.' To this we can only say, 'If the light that is in thee be darkness, how great is that darkness!' The 10th and 11th chapters of Genesis are unquestionably the best ethnographical document on the face of the earth. It more clearly explains the origin of the various important nations of the old continent, than all the writings of antiquity besides. From Josephus down, there has been great uniformity in its explanation; and all soberly-conducted antiquarian research, and almost every spadeful of earth thrown out of the buried catacombs and palaces of Egypt and Nineveh, do but tend to confirm it."

We are therefore brought to the conclusion, that man was made designedly, and in accordance with his dignity, "an exception to all the rest of the creation," so that while they were created all over the world, and in pairs or groups, and adapted to their several localities and to the ultimate use and benefit of man, man was created in one locality only, and in one pair only—"one male and one female"—and dispersed from this one blood of which God hath made all the nations of the earth, to the several bounds and habitations which God had before appointed unto them, and to which they were adapted by the constitutional powers given to them,—by outward agencies acting upon them,—and by God's providence making every thing accomplish the purposes of his good pleasure.

We will only add, that the ablest critics, even of the Ger-

* See Maurice on Lord's Prayer.

man school, have regarded the record in the book of Genesis, as teaching the original unity of the entire human race. "From two human beings, therefore," says Rosenmüller, "the universal race of men drew their origin."*

* Some, he adds, have doubted this, and denied that the authority of Scripture ought to constrain us to believe it (*e. g.* P. J. Brums, as quoted). Their opinions, however, he thinks have been diligently examined and refuted by Leonh. Joh. Carol. Justi, and others. (See as above, pp. 85, 86, and see also Hengstenberg on the confirmation given to the Genealogical Tables in Genesis, from the Monuments of Egypt, in his Egypt and the Books of Moses, ch. vii. p. 195, &c.)

CHAPTER VI.

THE HISTORICAL AND DOCTRINAL EVIDENCE OF SCRIPTURE —CONCLUDED.

Dei sapientia et bonitas limites regionibus, montes, et fluvios dedit : ille populorum sedes aut fingit aut mutat : hæc neque casu fiunt, neque ab æterno fuere.

It has now been shown that the Scriptures represent Adam and Eve as the original progenitors of the whole human family, and Noah and his sons as the only parents of the postdiluvian races of mankind. The Bible does not, however, involve the truth of its inspiration and the infallible assurance of its doctrines with any system of chronology. On this subject it has little to say, and from probable confusion and mistake in copyists, that little is involved in wisely-permitted confusion. Neither does the Bible *require* us, by any *necessity* of interpretation, to believe that ALL the different races of animals, plants, and insects, which are now found peculiar to their several continents, were destroyed by the flood, and preserved and again distributed by Noah. It would allow us, on principles of strict interpretation, to believe either that the submerged earth was the entire region inhabited by man, together with its plants and animals; or that, having destroyed the whole earth, with all its vegetable and animal productions, God created new genera of organized beings, suited to every climate, and assigned them then, as he did at the first, their several localities and provinces. *

* See Prichard's Researches into the Natural History of Mankind, vol. i. pp. 98–102. Dr Pye Smith's Geology and Scripture. Powell's Connection of Science and Religion, &c. Kirby, however, accounts for

But the Bible does require us to believe that ALL THE HUMAN RACE perished in the flood, and that from Noah and his sons ALL the existing varieties or races OF MEN have sprung. And to this doctrine of Scripture, ancient heathen writers, as might be shown, bear the attestation of general traditional belief. *

In reference to genealogy, it appears to us to have been the evident design of Scripture to dwell only upon the chosen line, from which, according to the flesh, Christ—" the Seed of the woman"—should proceed, omitting, or very partially noticing, all others. This is apparent both in the antediluvian and postdiluvian records, and is, in our judgment, the probable source of the historical and chronological difficulties suggested by the ethnological history of man. † While, therefore, much is said in the Bible about the race of Seth and Shem, but very little reference is made to the posterity of Cain and Ham.

Enough, however, is told us respecting Ham and his descendants, to trace some of them—under the influence of that curse, in which portions of the entire race seem, to some extent, to have been involved ‡—to the continent of Africa.

the present distribution of animals on natural principles, and in accordance with the literal explanation of the Bible. Habits and Instincts of Animals, vol. i. ch. ii.

* See this very strongly presented by Guyot in his Earth and Man, lect. x. and xii. pp. 280, 269, 270, 273, 277. Nolan's Bampton Lectures, p. 317, &c., and p. 492, &c., where may be found many heathen testimonies from classical writers. See also Gray's Connection of Sacr. and Prof. Literature. Smith's Patriarchal Age. Faber's Origin of Idol., vol. iii. b. vi., ch. i. to end of vol., pp. 359–600. Stackhouse's Hist. of the Bible, b. ii., § 2. Delafield's Antiq. of America, p. 284, and Anct. Univ. Hist., vol. i. p. 284, &c.

† See Sir Walter Raleigh's History of the World, b. i. ch. v. See also Nolan's Bampt. Lect., pp. 492–497, and the authorities there quoted. Also Burder's Oriental Literature, vol. i. p. 22, where he gives the authorities of Eusebius, Syncellus, Cedrenus (Chron. Pasch.), Josephus, Homer, Philo, and Plato. Faber's Origin of Pagan Idolatry. Smith's Patr. Age, Prel. Diss., and p. 158, &c. Prichard's Researches, vol. v. Appendix.

‡ In the Canaanites—the posterity of Canaan—we see this curse un-

For from Ham proceeded the Egyptians, the Lybians, the Phutim, and the Cushim or Ethiopians, who, colonizing the African side of the Red Sea, subsequently extended themselves indefinitely to the west and south of that great continent. Plutarch says expressly, that Egypt was called *Chemia*, or the country of Ham; and it has been thought that the Egyptian deity, Hammon or Ammon, was a deification of Ham. * Chum, the father of Cush, was also brother of Mizraim, the father of the Egyptians; and the CUSHITES, so often spoken of in the Old Testament, are the same as the Ethiopians. On this point,—which involves much of the direct historical evidence of the Bible to the unity of the human races as the posterity of the same original family,—we are met by the bold assertion of Dr Nott, which he labours to establish, that neither Ethiopia nor negroes are mentioned in the Bible. The Bible he regards—and in this opinion Professor Agassiz concurs—as the record and revelation of the Caucasian race exclusively. † We shall, therefore, enter into this inquiry at more length, than might be otherwise interesting.

doubtedly visited with most wonderful certainty and emphasis; but if Ham, as is possible, was also blamable, the consequences have been measurably extended with equal justice to other branches of his family; while, through this original wickedness on their part, and the consequent adaptation of their posterity to fulfil the purposes of God, the African races may yet do much towards praising and glorifying him. See Bush's Notes on Genesis, on ch. ix. 22–27, and Ainsworth's Annotations in loco. Nolan's Bamp. Lect., pp. 317, 492. Chrysostom on Gen., Homil. 29. Theodoret in Gen. qu. 58. Bochart Geog. Sacr. lib. i. cap. 2, col. 10.

* In his work De Iside et Osiride. See Calmet's Dict., art. Ammon. See also Nolan's Bampton Lect., p. 484, where Marsham, Bochart, and Vossius are quoted to the same effect. Ham, therefore, is the ultimate root of Egyptian genealogy, while Menu may be identified with Noah, being claimed traditionally as their first king. See ditto. And as civilization preceded barbarity, the early civilization and fictitious chronology of Egypt offer no difficulties, except to wilful sceptics. Dr Morton therefore defines the Egyptians to be the posterity of Ham. See in Ethnol. Journal, No. iv., p. 172.

† Lect. Appendix, pp. 138–146.

The term Ethiopia was anciently given to all those whose colour was darkened by the sun. Herodotus, therefore, distinguishes the Eastern Ethiopians who had straight hair, from the Western Ethiopians who had curly or woolly hair.* Strabo calls them "a twofold people, lying extended in a long tract from the rising to the setting sun." † Homer gives precisely the same description of the Ethiopians. ‡ So, also, does Apuleius,§ and accordingly we now know that the indigenous man in India was undoubtedly black—its white blood having come from Western Asia.|| Eusebius, therefore, tells us that the Ethiopians in the West came to Egypt from India in the East, and thence passed over the Red Sea into Africa, the whole of which they peopled.¶ Ethiopia, south of Egypt, was consequently well known to the ancients, and constituted a theatre of history, of civilization, and of empire. Indeed, Heeren and others think the civilization and religion of Egypt came from tribes beyond Meroe, in Ethiopia, who founded temples and colonies, and introduced the worship of Ammon, Osiris, and Phtha, known in Greece as Jupiter, Bacchus, and Vulcan. ** Eastern Africa also was certainly known in the time of the Caliphs, and noticed by Arrian. Ptolemy's most distant country, Agizymba, is probably Kissimbany, in the island of Zanzinbar, a negro country. †† Sallust, in his Jugurthine war, placed Ethiopia next to the countries *exusta solis ardoribus*, burned and dried

* Herodotus, vii. 69, 70. Anct. Univ. Hist., vol. xviii. pp. 254, 255.

† Lib. i. p. 60. ‡ Od. A. 22.

§ Lib. xi. p. 364. See Kitto, art. Cush, and Well's Sacred Geography under Cush.

|| Guyot's Earth and Man, p. 231.

¶ Chronicles, p. 26, Syncellus, p. 151, Calmet v. 27, American edition, or Well's Geography, art. Cush. See also Nolan's Bampton Lectures, pp. 495, 496, and the authorities there given, Eupolemus, Eusebius, and Bochart. "Chami vero filios totam Africam et partem Asiæ." Dr Simson after Josephus, Chron., p. i., p. 11.

** Ancient History, p. 58. Lipsius, however, is opposed to this view. Ethnol. Jour., iv. 172.

†† Pickering on the Races of Men, p. 189.

up by the heat of the sun, and speaks of a people beyond Ethiopia as "just and amiable, whose manners and customs resemble the Persians." *

The ancients, says Dr Anthon, included under the term Ethiopia those regions which we now call Nubia and Sennaar, together with part of Abyssinia. They were also acquainted with Lybia Interior, including Nigritia, on the banks of the Niger, and in a part of which is now Soudan. Their capital was called Nigera. Another of their cities, named by Ptolemy, Peside, seems to have stood near the modern Timbuctoo.

The Garamantes were a powerful nation, occupying a tract of country south, with a part of Soudan and Bornou, and carried on a traffic in slaves with the Carthagenians.†

The term Ethiopia, therefore, was applied by the ancients to all the fruitful lands stretching along the banks of the Niger, which were almost entirely unknown.‡ Herodotus, however, must have gone far enough to see those "Africans," whom he describes as "having the most curly hair of all men." And the genuine negro was assuredly known, since their portraits are found on Egyptian monuments, and their skulls among the Egyptian mummies.§

The children of Phut and the Lubim—who were of a deep dye, and may be considered as more especially the fathers of the negro race—settled in Africa. Hence in ancient days Lybia seems to have been the general appellation of Africa, from the Lubim or Lehabim. (Chron. Pash., p. 29.) Nor are there wanting memorials of Phut. In Mauritania there was a region and a river called after him, as we learn from St

* See a Fragment, quoted in Fairholme's Scripture Geology, p. 443.

† Ancient and Mediæval Geography, pp. 742 and 749.

‡ Pickering on the Races of Men, p. 46.

§ See Dr Morton's Crania Ægyptiaca; his Catalogue of Skulls, Philadelphia, 1849, 2d edition ; and his Observations on a Second Series of Ancient Egyptian Crania, in Proceedings of the Acad. of Natural Science of Philadelphia, October 1844. Also his Inquiry into the Aboriginal Race of America, App. No. iv., pp. 45–47. See also Belzoni's Plates, Burton's Excerpta, and Penny Cyclopedia, vol. i., p. 182.

Jerome ;—Mauritaniae fluvius usque ad presens tempus Phut dicitur: omnisque circa eum regio Phutensis.*

The ancients even attempted to trace the origin of the colour and of the curly hair of the Africans, and also of the sterility of that country which forms the boundary of Negroland, in the fable of Phaeton and the extraordinary influence of the chariot of the Sun, during his unskilful driving.†

That all the Ethiopians were descended from Chus or Cush, is expressly declared by Zonaras (21), who says, "Chus is the person from whom the Cuseans are derived. They are the same people as the Ethiopians." Such also is the testimony of Josephus, Eusebius, and Apuleius.‡ Calmet quotes, also, the author of Tarik Araba (Bibl. Orient., p. 425), as affirming that all the blacks were descended from Ham.§ The Easterns, therefore, say that Cush had a son named Hebaschi, the father of the Abyssinians. This word, which is the same as Ethiopia, signifies a people formed of a mixture of nations.|| And hence all Asia calls the Ethiopians Cush, as they do themselves.¶ The whole obscurity of ancient writers in the use of these words—Cush and Ethiopia—arises, therefore, from the different families of the Cushites, who by the different removals inhabited countries widely separated from each other.**

* See Biblioth. Sacra, 1847, pp. 745, 746, where it is argued that two great branches of the negro race emigrated to Africa at remote periods from each other, and from different parts of the old world. Mr Birch frequently found the word Kush on Egyptian monuments. See Ethnol. Journal, No. x., pp. 467, 468, that is from the 23d to the 14th century before Christ.

† A similar memorial tradition is preserved among the Feejee Islanders; see the Exploring Expedition, vol. vii.

‡ Joseph. Antiq., lib. i., c. 6 ; and Calmet, vol. v., pp. 20, 202, Am. ed., or Well's Sacred Geography.

§ See art. Ammon.

|| Calmet's Dictionary, art. Cush. This is the character of a great many of the negro tribes or nations.

¶ Josephus Antiq., lib. i., c. 7, and Calmet, art. Cush.

** The negro race of the Nuba have spread as far North and East as Sennaar, where a negro dynasty of the Fungi established itself in 1504, and

In the Scriptures, however, the use of the words Cush and Ethiopia are more definite and restricted. The term Cush is here *sometimes* employed to denote a part of Southern Arabia, but is *most generally* employed to point out exclusively countries in Africa, lying to the South of Egypt. (Ezek. xxix. 10, and xxx. 4–6.) The Hebrew term, Cush, is rendered Ethiopia, not only by the English version under the authority of its numerous and very learned authors, but by the Septuagint, Vulgate, and almost all the other versions, ancient and modern. "It is not, therefore, to be doubted," says Poole, "that the term *Cushim* has by the interpretation of all ages been translated by Ethiopians, because they were always known by their black colour, and their transmigrations, which were easy and frequent." "The term Cush in Scripture denotes," says Rosenmüller, whose oriental learning is undeniably great, "all the lands situated in the South, whose inhabitants have a black skin," that is, all denominated Ethiopia, and hence Blumenbach calls the negro race the Ethiopian. The Cushim in Scripture are also spoken of in connection with the Lubim, Sukim, Thut, and other nations of Africa who were found attached to the vast army of Shishak, king of Egypt, when he came up, B.C. 971, against Rehoboam, and in whose tomb, recently opened, there are found among his depicted army the exact representation of the genuine negro race, both in colour, hair, and physiognomy.* Champollion

has mingled itself with the Arab blood, and adopted a Mahommedan creed. See Penny Cyclopedia, vol. i., p. 182. Others also have spread very far. P. 9182, do.

* Negroes are represented on the paintings of the Egyptians chiefly as connected with the military campaigns of the 18th dynasty. They formed part of the army of Ibrahim Pacha, and were esteemed as soldiers at Moncha, and in S. Arabia.—Pickering's Races of Men, pp. 185, 189. That negroes were found in the armies of Sesostris and Xerxes, Herodotus assures us,* and we know that they compose in part the army of Egypt now.† Herodotus further states that eighteen of the Egyptian kings were Ethiopians.‡

* Euterpe, cap. 6; and Polyhymn, cap. 70.
† Buckhardt's Travels, p. 341. Dr Wiseman, p. 97.
‡ Euterpe, lib. vi.

also found upon the hieroglyphic monuments of Egypt the name Cush used for Ethiopia. Mr Gliddon informs us also that "the hieroglyphical designation of *KeSH*, exclusively applied to *African* races as distinct from the Egyptians, has been found by Lepsius as far back as the monuments of the sixth dynasty, B.C. 3000; but the great influx of Negro and Mulatto races into Egypt as captives, dated from the twelfth dynasty, when, about the twenty-second century B.C., Pharaoh SESOURTASEN extended his conquests up the Nile far into Nigritia. After the eighteenth dynasty, the monuments come down to the third century, A.D., without one single instance, in the Pharaonic or Ptolemaic periods, that *Negro* labour was ever directed to any agricultural or utilitarian objects." * The term Cushite, therefore, while it applies in Scripture to the Arabian races, "became also the appellative of a negro." In this sense it is employed by the prophet Jeremiah (xiii. 23), when he asks, "Can the Ethiopian," or as it is in the original, *the Cushite*, "change his skin, or the leopard his spots?" "This text," say Patrick and Lowth, "is most probably to be understood of the Africans or blackmoors, as they are commonly called." Luther's German translation has *Mohrenland*, a term equivalent to negroland, or the country of the blacks. Dr Watts followed this meaning in the well-known words of one of his hymns:—

> "As well might Ethiopian slaves
> Wash out the darkness of their skin,
> The dead as well may leave their graves,
> As old transgressors cease to sin."†

The prophet, six hundred years before the Christian era, thus affirms the existence of black colour in this particular class of men. He quotes a proverb,‡ and thus proves that an unchangeable blackness of colour had long been familiarly known

* See in Ethnolog. Journal, No. vii., p. 310.

† B. ii., 163.

‡ This proverb is found also in profane writers—"To wash the Ethiopian or blackmoor white."

to characterize this class of human beings.* And as the prophet denominates them Cushites, he thus teaches that some tribes of people, descended from Cush the eldest son of Noah, and inhabiting a country which the Septuagint, Vulgate, and other interpreters coincide in naming Ethiopia, were black. It is thus evident that the Scriptures declare the negro race to be the descendants of Noah, and therefore of the same original family with all other races of men.

But it is *equally* certain, as we have seen, that the term Cushite is applied in Scripture to other branches of the same family, as for instance to the Midianites, from whom Moses selected his wife, and who could not have been negroes. The term Cushite, therefore, is used in Scripture as denoting nations who were not black or in any respect negro, and also countries south of Egypt, whose inhabitants were negroes; and yet both races are declared to be the descendants of Cush, the son of Ham. Even in Ezekiel's day, the interior African nations were not of one race, for he represents Cush, Phut, Lud, and Chub, as either themselves constituting, or as being amalgamated with, "*a mingled people*" (Ezek. xxx. 5); "that is to say," says Faber, "it was a nation of negroes who are represented as very numerous—ALL the mingled people."† We thus learn—as far as Scripture authority is admitted—1. That all men, even the negro race, are from the same original stock. 2. That from the same ancestor, races of different colour and physiognomy proceeded; and therefore, 3. That there was a time when the negro peculiarities of colour and form did not exist; but that from some cause or causes, they originated at a period subsequent to the dispersion. We further learn, in the *fourth* place, that such a change from one physiognomy to another was not regarded by the prophet as impossible, but only as a change of very difficult and extraordinary character; for at the very same time that he asks this question, he calls upon the people to

* The black race are known to have existed for 3445 years.

† Diss., vol. ii., p. 305.

secure that moral change to which he had resembled the colour of the skin, by repentance and conversion, showing, as Christ did on another occasion, that "what is impossible to men is possible with God." *

These remarks we have made by way of anticipation, in order more fully to illustrate and establish the teaching of Scripture regarding the unity of all the races of men. That unity, it has been shown, the Scriptures teach both historically and doctrinally. They teach that all men took their origin in the divinely-created human pair, and that all the races of men, black and white, African and Caucasian, were subsequently dispersed from one postdiluvian stock. They teach that all are sinners, and in need of a common salvation. They teach that there is but one Name under heaven by which any man can be saved. And they require the gospel of this grace and mercy to be preached to EVERY CREATURE.

The Scriptures further inform us, that the heathen are given to Christ for his inheritance, and the uttermost parts of the earth for his possession. His kingdom is to include all nations, and kingdoms, and tribes, and people under the whole heavens. And while even China† and the islands of the sea are specified as among the future conquests to be achieved by this Prince of Peace, "the people of Ethiopia also, and men of stature shall," it is foretold, "come over unto him, and they shall be his." "They shall come after thee in chains,"—that is, in their character and condition of servitude, and as slaves,—"they shall come over, and they shall fall down unto him. They shall make supplication unto the church, saying, Surely God is in thee, and there is none else—there is no

* Matt. xix. 24. See Lowth and Jortin in Mant and Doyly's Bible, on Jer. xiii. 23.

† Isa. li. 12—Sinim, a remote country in the S. E. extremity of the earth, as the context intimates. The Chinese were known to the Arabians by the name of Sin, and to the Syrians as Tsini. Other Asiatics gave them the same name, and it is known to the Chinese themselves, whose fourth dynasty was called Tshin. At Babylon the Jews might have easily heard of them.

other God."—Isa. xlv. 14.* "From beyond the rivers of Ethiopia," as Zephaniah prophesies—that is, from the very centre of Africa—"my suppliants shall bring mine offering." —Zeph. iii. 10. "Ethiopia," says the inspired Psalmist, "shall soon stretch out her hands."—Ps. lxviii. 31. And among those of whom it will be said in the great day of accounts, "that this and that man was born in her," Ethiopia shall be enumerated as well as other countries of the globe.—Ps. lxxxvii. 4.

Such, then, is the clear and unequivocal doctrine of Scripture regarding the unity of the human race, as involved in all its teachings, and as received by all those in every age who believe it to be the word of Him who, as he knoweth all things, "cannot lie," and who, as HE IS THE TRUTH itself, will not deceive.

This doctrine, be it observed, Scripture teaches us, not as a matter of scientific knowledge, but as the foundation of all human obligation, and of the *universality* of human charity. IT MAKES EVERY MAN OUR BROTHER, and it proclaims that we are "DEBTORS TO ALL MEN, both to the Greeks (or civilized) and to the barbarians, to the wise and to the unwise," having "the everlasting gospel" intrusted to us for their benefit.—(Rom. i. 14.) And as ALL MEN are commanded to repent and believe the gospel, so are we commanded to preach it to all men, whether they will hear or whether they will forbear.

From what we have said, it will be at once perceived that the gospel must stand or fall with the doctrine of the unity of the human races. For if, as it is alleged, the Caucasian race ALONE have any interest in the revelations, the promises, and the threatenings of the Bible, then it follows that the

* These countries are given as samples of the entire heathen world. According to Knobel, their stature is here mentioned in order to show they were able-bodied, and would be profitable servants to the Jews. Whether these chains are to be considered as imposed by the conquerors, the words leave undecided. Whatever be the spiritual meaning of the passage, it is based upon the chains and slavery of a captive condition. See Alexander on Isaiah, vol. ii. pp. 118, 119.

gospel ought not to be preached to any other than TRUE AND GENUINE CAUCASIAN men. But where and how are these to be found? Amid the incalculable intermixture of races which has taken place among men since the beginning of time, where is the man who can prove he is a pure Caucasian? THERE IS NOT ONE.* And, therefore, there is not one who can dare either to preach or to hear the gospel. The gospel becomes an empty sound, and all religion is at an end.†

NOTE.

SCRIPTURAL KNOWLEDGE OF AFRICA.

The Scriptures are fuller in their statements even in geography, than any other ancient writings which precede the days of the Greek geographers, who, in comparison with the Old Testament, are but modern. They are so accurate as to constitute the best guide-books to travellers in the countries in which the occurrences of the Scriptures took place. In their allusions to the more distant lands to which reference is made, they exhibit no error. Where they speak of the distant West, they use the phrase which is translated in our version, "the isles of the sea," or "of the Gentiles." *The habitable places of the sea* would be more in accordance with the original, and will include all countries which must be reached by navigating the sea. India is expressly mentioned in Esther i. 1, and viii. 7, and 1 Mac. viii. 8; and if it did not embrace in their geography the whole of Hindostan, it extended far north of it, over a considerable portion of Tartary into the desert of Cobi.

* "The primitive races no longer exist. All, or nearly all, the inhabitants of the earth are of mixed blood."—*Ethnol. Journal*, p. 129.

† It is not known nor agreed upon what was the original race, complexion, or form of either Adam or Noah. Mr Pickering, the last writer on the subject (on the Races of Men), gives reasons for supposing the African to be the centre and origin of the human family. See p. 305, &c. So also does Hamilton Smith. The Ethnological Journal admits that there is not now a pure race of men to be found. Dr Bachman offers very probable reasons for the opinion that the race of men were intermediate in colour and form between the black and the white, and that the white are as much altered now as the black. See on the Unity of the Human Race, part ii. chap. i. pp. 152–164.

China is evidently intended by the land of Sinim, (Isa. xlix. 12.) and has been called, from an unknown antiquity, throughout southern and western Asia, by the name Sin, Chin, or Jin. Porcelain vessels with Chinese inscriptions have been found in the monuments of Thebes. The Magog of Ezekiel is the country of the Mongolians. The Phœnicians were a bordering and friendly people, and Tyre was not farther from Jerusalem than Augusta in Georgia from Charleston, or Montgomery from Mobile. The nearest inhabitants of Galilee might have gone down of a pleasant morning to market. All the knowledge of the Tyrian and Phœnician navigators, pouring in from Carthage, and their numerous colonies, scattered over the islands of the Mediterranean, on either side of it, and beyond the Pillars of Hercules on the African and European coast, was easily accessible to the Jews.

They had resided in Babylon, the great centre of oriental commerce, had lived in Media under Darius the Mede, and in Persia under Cyrus the Great. Many had served in the army of Alexander the Macedonian, and were probably among the invaders of India. They had occupied the central ground passed over by the caravan trade between Persia and India on the one side, and Phœnicia and Egypt on the other. Before Paul and the New Testament writers lived, Africa had been circumnavigated by Tyrian sailors under Pharaoh Necho.* Hanno the Carthaginian had explored the coast of Western Africa. Arian made the Periplus of the Erythrean Sea, sailing around the coast of India on the east of the Indian Ocean, and down Africa on the west, a voyage which had probably also been often made before by the allied fleets of Solomon, and Hiram king of Tyre. The voyage of Pythias to the North Sea had taken place, and of Nearchus down the Indus and up the Persian Gulf to the mouth of the Tigris. The Jews had long been familiar with Egypt. It was no wonderful feat to go there. They had never from Abraham to Paul lost their connection with it. From 301 to 180 B. C., the period of the Ptolemies, it was a place of shelter to them. In 153 B. C., Onias built a temple at Leontopolis, which was long the rival of that at Jerusalem. At Alexandria they had the most splendid synagogue, with its accompaniment of schools, which existed in the whole world. The geographers Eratosthenes, Hipparchus, and Strabo, had already gathered from different sources a very considerable knowledge of the earth and its principal nations. Mela and Pliny were the contemporaries of the writers of the New Testament. It is impossible that men, living as these writers did, in the very central parts of the civilized world, should be so extremely ignorant of the inhabitants of different countries as Dr Nott alleges. Especially may we suppose the apostle Paul, a man of no mean condition, born in a

* 616 B. C. This voyage was 2100 years before the Portuguese, under the lead of Vasquez de Gama, doubled the Cape of Good Hope.

city which, according to Strabo, excelled even Corinth and Athens, and all other cities, as a place of education, to have been acquainted with this knowledge then common among men of ordinary intelligence. Now, these countries which they actually did know, are inhabited by the principal varieties of the human race. The Caucasian, Mongolian, and Negro, could not be unknown to them. The Mongolian they had seen in their wanderings towards central Asia, and the Negro must have attracted their attention in Egypt. The Scythians, the prototypes of the modern Tartars, seven centuries before Christ, had invaded south-western Asia, pushed their inroads as far as Egypt, and left their name in Scythopolis, in the valley of the Jordan. Dr Nott does indeed struggle hard to show that the word Cush is wrongly translated in our English Bible by the word Ethiopia. And we are willing to admit that the one word is not the etymological equivalent of the other, and that in these modern times the word Ethiopian is not by usage applied to all the descendants of Cush, or Ethiopia to all the countries they inhabit. But it is true, that by the ancients Ethiopia was applied to both Asiatic and African nations. They used the term according to its sense, of nations "burnt black in the face," αἰθος την ὀψιν.

In like manner, the name Cush, for which in the translation Ethiopia is substituted, is used in the Scriptures for Asiatic and for African countries. The Cush, in the description of the Garden of Eden, is probably the country east of the Tigris, and north of the Persian Gulf. Chusistan, a portion of Persia, bears the name, and Jonathan, the Targumist, on Gen. x. 6, evidently understands by Cush an Asiatic people. But it is equally plain, that the name Cush is also applied to an African country and people. Indeed, so clear is this, that Gesenius and Shulthess have wrongly contended that, in the Scriptures, it is applied to no other. It was a country which lay south of Egypt above Syene, the Meroe of the ancients, and the Abyssinia of the moderns. The Chub of Ezek. xxix,* is either the Nubia of modern geography, or a district called Chuba, still further south. The land of rustling, or clanging wings, of Isa. xviii. 1, beyond the rivers of Cush, is evidently the African Ethiopia, including Nubia, Kordofan, and Abyssinia.† Over this country, in the days of Hezekiah, reigned Tirhaka, a king of great renown, who also had obtained the dominion of Upper Egypt. When Hezekiah was threatened by Sennacherib, knowing that the Assyrian army was on the way to Egypt,‡ he marched to the relief of the Jewish monarch. He is the Ταρακος of Manetho, and the Τεαρκων of Strabo, and his figure, name, and the expedition he undertook, and the prisoners he captured, are recorded on the walls of a Theban temple, at Medinath Abu, and on the mountain Barkal in Abyssinia.§ And in spite

* Ezek. xxix. 10; xxx. 6, 9. † Strabo, xv. 6. ‡ Herodotus.
§ Wilkinson's Ancient Egyptians, i. pp. 140, 387; Rossellini, Mon. ii. tab. 8.

of Dr Nott's contemptuous questioning of the truth of 2 Chron. xiv. 9, it is very evident that Zerah, the Ethiopian, did come down with a "thousand thousand," *i. e.* many thousands, on "so insignificant a king as Asa." He came from Africa, not Arabia; among his soldiers were Lubim, an African people,* and he had 300 chariots, which were not used by the Arabs in their warfare.† The name Cush, too, has been found on the monuments as referring to an African people, as Dr Nott, with a facility fatal to his argument, p. 140, allows. Indeed, we find it used of the Prince of Ethiopia, on a temple at Beit-e-wellee in Nubia, where the conquests of Rameses the Second are found portrayed, under circumstances in which there can be no mistake; for the Ethiopian army, composed of negroes, is represented as routed before the chariot of the victor, and negro captives are led bound beside the conqueror. He is then exhibited, in another compartment, as receiving the tribute of the conquered nations, consisting of gold, panthers' skins, tusks of ivory, logs of ebony, long-horned oxen, bears, lions, giraffes, elephants, brought by a numerous procession of negroes; Egyptian scribes are taking an account of the tribute: then he is pictured as investing "the royal son of Kush" with the vice-regal power over this subjugated country, his name and title being written in hieroglyphics over his head.‡ On the same is an address to the conqueror, "Beneath thy sandals is *Kol*, the barbarian land, *Kush* (Nigritia) is in thy grasp." Mr Gliddon informs us, that by the name Kush "the Egyptians exclusively designated the negro and Berber race in hieroglyphics," and though he denies that this name can be identified with the Cush of Scripture, we beg leave to differ from him. We have traced the Scripture use of the word to the country south of Egypt, inhabited in part by the Berber and negro varieties of men. We have now monumental evidence, by his own admission, that the same word is applied to the full negro of Nigritia, thus connecting him with other Cushites, with Ham and with Noah. If the KHeM of the monuments is the Ham of the Scriptures, and the Kanana of the monuments is the Canaan of the Scriptures, why is not the monumental

* 2 Chron. xvi. 8; comp. xii. 4.

† In the invasion of Judah in the days of Rehoboam, by Shishak [Sheshonk], king of Egypt, in which he took Jerusalem and the "fenced cities of Judah," a vast army of Lubim, Sukkiims, and Cushites followed him. These Sukkiims are in the LXX. the Troglodytes, whom Strabo, l. xvii. 1, and Pliny, Hist. Nat. vi. 29, 34, place in Meroe, and Rosenmüller * identifies with the Shangalla, a negro race in Abyssinia. The victories of Shishak over Judah-melek-kah, "*King of the country of Judah*," are sculptured on the monuments at Karnak.

‡ "The royal son of Kush, or Ethiopia, Amounemape-t, son of Poeri, the truth-speaking." Gallery of Antiq. from the British Museum, by S. Birch, part ii, p. 96. "*Kush*, barbarian country, perverse race, being," says Mr Gliddon, "the Egyptian designatory name and title of Negroes prior to B. C. 1690." Anc. Egypt, pp. 24, 26, 27, 59: comp. Rossellini, iii. 1277; Champollion. Eg. et Nub. i. Planch. xi. xv, xvi.

* Alterthumskunde, iii. 353.

Cush also the Cush of the Bible, extending westward over central Africa and including the negro race?

Thus signally does the effort to prove the Cush of Scripture always to refer to a Caucasian race, fail of any solid foundation. Thus impossible is it to prove, in the face of facts, that the sacred writers were unacquainted with the negro variety of man. Josephus knew something of this country of Ethiopia, for he represents Moses, while yet in Egypt making war, as a general serving under the Egyptian rule, upon Ethiopia, and subduing the people. The negro, too, had been fully described, nearly five centuries before Christ, by Herodotus, who became acquainted with him in Egypt, and afterwards found a colony of the same black-skinned and woolly-haired people in Colchis, on the shores of the Euxine. When Jeremiah then asks, "Can the Ethiopian change his skin, or the leopard his spots?" he as truly referred to the negro as a well known variety of men, as he did to the leopard as a well-known variety of the feline race. That he should be ignorant of them, when they constituted to some extent the armies of Egypt, which were often contending with their natural enemies, the Babylonians, on the territories of the Hebrews, is beyond belief. So numerous were the negroes in the armies of Sesostris, that Herodotus seems to infer that the Egyptians themselves were μελαχροες, "a black-skinned," and ὀυλουριχες, a woolly-haired people. It will be remembered, too, that Jeremiah spent the last days of his life in Egypt, whither he fled after the fall of Jerusalem, with the miserable remnant of his people.

In the original migration of nations, intercourse must have been kept up for a length of time between the migrating hordes and the parent stock, even as it is now. Commerce was rife over nearly the whole of the ancient world, as it is at this day. Many a Jew had seen the negro in Egypt. His ancestors had seen the temple at Karnac, perhaps, when it was building, and he had stood wondering in the Ramesium ages before Champollion was born. In countless things in which moderns are ignorant, the ancients were wise. The sacred writers, then, did know the principal varieties of the human race, were acquainted with the Mongol, the Caucasian, and the Negro, the varieties of men most unlike each other, and did, notwithstanding, affirm all nations of the earth to be of one blood, and to have descended from Noah, the second founder of the family of men, and from Adam the first progenitor. Dr Nott knows that this is the representation of the Scriptures: hence his inconsistent zeal, on the one hand, to destroy the belief of men in the integrity and inspiration of the Word of God; and, on the other hand, to force upon the divine Word an interpretation, on the supposition that its declarations are true, which will suit his preconceived theories. A sad addition to the numerous proofs literature contains of the unhistoric spirit and easy faith which scepticism inspires.—*Presbyterian Review for Jan.* 1850.

CHAPTER VII.

THE UNITY OF THE RACES PROVED FROM THE RELIGIOUS CHARACTER OF ALL MEN; THE ADAPTATION OF CHRISTIANITY TO ALL MEN; AND THE TRUTH OF THE MOSAIC RECORDS.

Religion is the magnet of humanity, binding together in one united body all the races of men.—Ex infinitâ societate generis humani.

The word Religion seems emphatically to express the reciprocal bond or obligation of men, as created beings, to God our Creator, and to each other as fellow-creatures, or creatures of the same God.—RICHARDSON'S DICTIONARY.

WE proceed to remark, before passing from the Scriptural question, that the religious opinions and character of all men form another, and in itself an overwhelming, proof of the unity of the human races.

Religion implies such a spiritual nature in man as leads him to the belief of a superior power or powers governing the world, and to the worship of such power or powers; of a future state of existence, and of that state as one of rewards and punishments; of man's accountableness to God; and of the necessity, in order to please him, to practise moral as well as religious duties. In this religious nature, we find man's peculiar and pre-eminent distinction exalting him above all lower animals, and elevating him to an equality with angels.

Now, in this characteristic of the human species, all men are alike distinguished. Among those who differ most from

each other, there is no difference in this respect. All are religious beings. All believe in the existence of some superior power or powers, whom they fear and reverence. All perform religious rites, and offer sacrifices and prayers. All have a consciousness of moral accountability, a knowledge of good and evil, a sense of guilt and misery, a fear of death, and a dread of retribution. This proves that all men have sprung from a common root of bitterness, while it determines also the necessity of an atonement—"a sacrifice for sin."*

All the races of men have their priests, their superstitions, their creeds. A sufficient outline may, therefore, be drawn from the various records which have been preserved to establish an original identity as to the great facts of religion, and a common correspondence as to many fundamental convictions.† It is true, all possess their peculiar characteristic mythologies. These, however, in every case, like the poetical pictures of the Greeks and Hindoos, bear an evident relation to the local features and physical condition of the regions where they were invented.‡ Hence the mythology appears the latest developed, and the most fluctuating part of all religions, and therefore the divergence of their mythologies proves nothing against the deduction of those religions from a common source.§ Such an original and common source is made necessary to account for the existing and past religious views of men, both from the essential similarity in their rites, ceremonies, and deities, and also from the fact which a comparison of religions and an investigation of the oldest sacred books discover, that all nations commenced with a purer worship of God—that the magic influence of nature upon the imaginations of the human race afterwards pro-

* See this point urged in Murray's Truth of Christianity Demonstrated, chap. ix. p. 229. Faber and Outram on the Origin of Sacrifice; Magee on the Atonement.

† See Gray's Connection of Literature and the Sacred Writings. Lond. 1819. Vol. i. chap. 1, and passim.

‡ See Wordsworth's Greece—Introduction.

§ Schlegel in Preface to Prichard's Mythology of Egypt, p. 39.

duced polytheism, and at length entirely obscured the spiritual conception of religion in the belief of the people, whilst the wise men alone preserved the primitive secrets in the sanctuary. Such are the conclusions of the learned Schlegel respecting all nations.*

Sir William Jones has established the same positions by an exhibition of the original identity of the religions of Egypt, India, Greece, and Italy, and from the comparative purity of *their* earliest faith.†

Dr Prichard has proved that "the same fundamental principles are to be traced as forming the groundwork of religions, institutions of philosophy, and of superstitious observances and ceremonies among the Egyptians and several Asiatic nations."‡ The "almost exact parallelism which I have traced between the Egyptians and the Hindoos, even in arbitrary combinations, which present themselves in almost numberless examples, it is impossible to explain," he says, "without the conclusion I have adopted."§

And as regards the numerous tribes of Indians who inhabit the New World, and who have been supposed by many to be distinct and separate species, Mr Squier, in his valuable work on the Ancient Monuments of the Mississippi Valley,‖ has these remarks from Dr M'Culloch:—"If we are not mistaken in assigning a religious origin to that large portion of ancient monuments, which are clearly not defensive, nor designed to perpetuate the memory of the dead, then the superstitions of the ancient people must have exercised a controlling influence upon their character. If, again, as from reason and analogy we are warranted in supposing, many of these sacred structures are symbolical in their forms and combinations, they indicate the prevalence among their builders

* Schlegel, pp. 29, 30, and Ethnological Journal, No. v. pp. 153–156.

† Works, vol. iii.—On the gods of Greece, &c.

‡ Analysis of Egyptian Mythology, &c., roy. 8vo, Lond. 1838, p. 11.

§ P. 364.

‖ Phil. and Antiquarian Researches, p. 225.

of religious beliefs and conceptions, corresponding with those which prevailed among the early nations of the other continent, and which in their elements seem to have been common to all nations, far back in the traditional period, before the dawn of written history."

In an elaborate paper on the Hindu Tabernacle, in the Journal of the Royal Asiatic Society, the unity of all oriental religions and deities is very learnedly pointed out. "Whether," it is said in conclusion, " we look at the corresponding traits of character in MOLOCH and KALI, in BAAL-PEOR and the CHIUN of AMOS; at the mutual assumption of either sex by SIVA and his partner; at the term Mother being applied to the latter; and also to the SUCCOTH-BENOTH (ASTARTE or MYLITTA) of the Assyrian, Phœnician, and other nations; at the cow's horns (so called) of Assyria, and the crescent of India; at the young virgins who made a sacrifice of chastity to the SUCCOTH-BENOTH of antiquity, and to the consort of the Oriental SIVA; at the use made of the regular female votaries of both systems; at their mutual assumption on certain occasions of the male attire; at the lion as belonging to the goddess of Assyria, and also to her of India; to the festival of SHACH or SACA, and to that of SATTI or SAKTI, in regard to the lascivious way in which it was conducted, and the peculiar garments worn on that occasion; at the term SALAMBO being the name of the one goddess, and also of the other; at its true meaning, in reference to a mountain where they mutually dwelt; at the BAAL-PEOR of Assyria, the OSIRIS of Egypt, the φαλλὸς of the Greeks, the PRIAPUS of the Romans, and the LINGAM of the Hindus (worshipped now in the temples of the East),—we see some of the most striking coincidences, which never could have been the result of any thing but the identity of their origin." *

Mr Wait also, in a work justly regarded as pre-eminently learned, entitled Jewish, Classical, and Oriental Antiquities, containing illustrations of the Scriptures, and classical records

* In vol. for 1838, art. vi. p. 87.

from Oriental sources,* arrives at the following conclusions:—
"Thus have we exhibited a parallel between the Jewish, the Oriental, and Classical writings (although the necessity of more diffusely elucidating many particulars in the subsequent volumes has caused the omission of several coincidences in this), and notwithstanding the antiquity of the Egyptian hierarchy, we have shown that the Israelitish institutions are not to be referred to their school, but rather to the patriarchal remains, remodelled and enlarged, at the delivery of the law at Mount Sinai. It has also been proved, that whatever the law of God might have possessed, at the time of its promulgation, in common with the idolaters, these particulars did not originate with the latter, but belonged to the religion of the patriarchs, and after the general defection in the Plains of Shinar, were made articles of faith by the builders, as they fixed themselves in their respective settlements, from whence arose the strong resemblance that subsisted between the different schools of the Polytheistical system, and the coincidences which we have remarked between them and the Mosaic law."†

The same inquiry Dr Prichard has pursued in reference to the African and Negro races, by an elaborate development of their religious opinions and practices, and then concludes respecting all the varieties of men.

"If we could divest ourselves of all previous impressions," he says,‡ "respecting our nature and social state, and look at mankind and human actions with the eyes of a natural historian, or as a geologist observes the life and manners of beavers or of termites, we should remark nothing more striking in the habitudes of mankind, and in their manner of existence in various parts of the world, than a reference, which is every where more or less distinctly perceptible, to a state of existence after death, and to the influence believed both by bar-

* By the Rev. Daniel Guilford Wait, LL.D., B.S.A.S. Cambridge, 1832.

† See p. 295. ‡ Researches, vol. i. pp. 175, 176.

barous and civilized nations to be exercised over their present condition and future destiny by invisible agents, differing in attributes according to the sentiments of different nations, but universally believed to exist. The rites every where performed for the dead, the various ceremonies of cremation, sepulture, embalming, mummifying, funereal pomps and processions following the deceased, during thousands of successive years in every region of the earth—innumerable tumuli scattered over all the northern regions of the world, which are perhaps the only memorials of races long extinct—the morais, pyramids, and houses of the dead, and the gigantic monuments of the Polynesians—the magnificent pyramids of Egypt and of Anahuac—the prayers and litanies set up in behalf of the dead as well as of the living, in the churches of Christendom, in the mosques and pagodas of the East, as heretofore in the pagan temples—the power of sacerdotal or consecrated orders, who have caused themselves to be looked upon as the interpreters of destiny, and as mediators between the gods and man—sacred wars, desolating empires through zeal for some metaphysical dogma—toilsome pilgrimages performed every year by thousands of white and black men, through various regions of earth, seeking atonement for guilt at the tombs of prophets and holy persons,—all these and a number of similar phenomena in the history of nations, barbarous and civilized, would lead us to suppose that all mankind sympathise in deeply-impressed feelings and sentiments, which are as mysterious in their nature as in their origin. These are among the most striking and remarkable of the physical phenomena, if we may so apply the expression, which are peculiar to man, and if they are to be traced among races of men which differ physically from each other, it will follow that all mankind partake of a common moral nature, and are therefore, if we take into account the law of diversity in psychical properties allowed to particular species, proved by an extensive observation of analogies in nature to constitute a single tribe."

Again, in his last work, Dr Prichard says,* "We contemplate among all the diversified tribes, who are endowed with reason and speech, the same internal feelings, appetencies, aversions; the same inward convictions, the same sentiments of subjection to invisible powers, and more or less fully developed, of accountableness or responsibility to unseen avengers of wrong, and agents of retributive justice, from whose tribunal men cannot even by death escape. We find every where the same susceptibility, though not always in the same degree of forwardness or ripeness of improvement, of admitting the cultivation of these universal endowments, of opening the eyes of the mind to the more clear and luminous views which Christianity unfolds, of becoming moulded to the institutions of religion and civilized life; in a word, the same inward and mental nature is to be recognised in all the races of men. When we compare this fact with the observations which have been hitherto fully established, as to the specific instincts and separate psychical endowments of all the distinct tribes of sentient beings in the universe, we are entitled to draw confidently the conclusion, that all human races are of one species and of one family."

Here, then, we have a class of facts in the history of our race, for which our opponents are bound to account. They are facts. Their existence is a fact. They are as much facts as the colour and other peculiarities of extreme varieties of the race. They are also constant facts—facts invariable and immutable. If, therefore, physical facts stand in the way of the unity of mankind and demand solution, so do these moral facts stand in the way of a diversity of races, and refuse any possible explanation, except upon the supposition of an original unity of the human family. There are therefore difficulties on both sides of this question. But as we have found that the presumption is altogether in favour of the doctrine of the unity of the race, we must therefore believe that, however unaccountable, these physical differences are variations

* Nat. Hist. of Human Species, pp. 545, 546.

which have sprung up from some cause or causes, in a race originally one.

In connection with the previous argument, it may be stated, in the next place, that not only are all men similar in their moral and religious constitution, but also in the perfect adaptation of Christianity to their nature, and the perfect similarity with which all—in proportion to their ability and opportunity—are affected by it.

Christianity is a remedial system. It implies the existence of danger and disease—of guilt and depravity. It implies the love of sin and aversion to holiness, and the consequent necessity for a divine influence to "work in man to will and to do," before he can either receive the truth in the love of it, or feel it in its power and efficacy. It implies further, that even when proclaimed and pressed upon the attention of men, while "many are called few will be chosen," because "they will not submit themselves to the righteousness of God."

Now, just such is the actual impression made by the gospel on all men. And as in Christ Jesus there is neither male nor female, Jew nor Greek, barbarian nor civilized, bond nor free, black nor white, Caucasian nor negro;—and as in its view all are one and there is no difference before God, "the whole world being found guilty before him;"—so it is also true that all men every where treat this gospel alike. To all that believe, it is the wisdom and power of God to salvation, while to all that perish—to all that neglect or disbelieve or make light of it—it is foolishness. In all men there is the same enmity to the truth and the same stumbling at its difficulties. In all, there is the same consciousness of its awful verity. In all, there is the same appreciation of its simple doctrines "commending themselves to every man's conscience in the sight of God." And in all by whom it is believed, the gospel produces the same holy and heavenly results. The negro, therefore, is just as sensible of his need of the gospel, just as unwilling to believe and obey the gospel, and just as truly changed and sanctified by it when he is converted, as the

white man. In proportion to his knowledge, means, and opportunity, he is not a whit less susceptible to the power of every truth and principle of the gospel, and to the saving and sanctifying influences of the Holy Spirit. To say otherwise is to give the lie to every man's experience—to the experience of every minister and member of every Christian denomination in every part of the world,—it is to deny that the sun shines in the heavens.

The equal adaptation of Christianity to every human being, and the equal susceptibility of every human being to the gospel, is therefore another and demonstrative evidence that as in Adam all died, and as in Christ all are made alive, "God hath made of one blood all the nations of the earth."

"The Christian principle is therefore universal: it embraces the whole human race. It proclaims its grand truths independent of localities; it is as suitable for China as for Britain—for Siberia as for the South Sea Isles. This gives it a distinctive character from all other systems of religion. It exercises its influence over the human heart and outward condition of mankind irrespective of climate and physical circumstances. It has God for its object, and the universe for its theatre. It cheers the path of man in the desert, and produces moral order and domestic happiness in the most savage wilds of nature. There is nothing too rude that it cannot polish—nothing too stupid that it cannot enlighten. It pours riches and honour, and comfort and intelligence, on every spot of the earth's surface where its voice is proclaimed."

We are thus led, before concluding this chapter, to mention another corroborative argument, by which the testimony of Scripture as to the unity of the race is made conclusive, and that is the authentication given to its record of man's common origin by a mass of evidence which is perfectly irresistible.

Let it then be borne in mind, that there was every thing to favour the certain knowledge of the truth respecting man's origin and history at the time of Moses. The duration of human life, which connected Adam and Moses by a few

links. rendered the transmission and knowledge of the facts as certain then, as if conveyed now by a father to his children. There is no monument or knowledge of any people prior to those whose history the Bible gives from Adam to Moses, while the time it allows for the establishment of nations, would have been fully adequate to the propagation, diffusion, and establishment of the human race.* The protracted period to which the lives of men were then extended, also allowed more scope for the operation of those causes, whatever they are, which influence the form and features of men, so that the peculiarities dependent on these causes would then become more complete and permanent, especially when we remember the universal custom then prevalent of adhering to one family in forming matrimonial alliances.†

The religious character of men of every race corroborates, therefore, the Mosaic records in a most surprising manner.‡ Thus says Sir William Jones, in a passage formerly quoted:— "On the preceding supposition that the first eleven chapters of the book, which it is thought proper to be called Genesis, are merely a preface to the oldest civil history now extant, we see the truth of them confirmed by antecedent reasoning, and by evidence in part highly probable, and in part certain; but the connection of the Mosaic history with that of the gospel by a chain of sublime predictions unquestionably ancient, and apparently fulfilled, must induce us to think the Hebrew narrative more than human in its origin, and consequently true in every substantial part of it, though possibly expressed in figurative language, as many learned and pious men have believed, and as the most pious may believe without injury, and, perhaps, with advantage to the cause of revealed religion. If Moses, then, was endued with supernatural knowledge, it is no longer probable only, but absolutely

* See Sir W. Jones's Works, vol. iii., p. 191. The particular chronology to be adopted, the Bible, we have seen, leaves open for discussion.

† Sumner's Records of Creation, vol. i., pp. 370, 371. Gen. xxiv. 28.

‡ See Sir Wm. Jones, ibid. pp. 191–197. Murray's Truth of Christianity demonstrated from ancient Monuments, Coins, &c.

certain, that the whole race of man proceeded from Iran, as from a centre, whence they migrated at first in three great colonies, and that those three branches grew from a common stock, which had been miraculously preserved in a general convulsion and inundation of the world."

NOTE.

ADAPTATION OF CHRISTIANITY TO THE NEGROES.

We make some admirable extracts relating to this topic from the report of the South Carolina (Methodist) Conference Missionary Society, presented at their late meeting in Camden :—

"In this good work your missionaries have, with scarce any exception worth mentioning, been seconded by the cordial support of the proprietors, and by their continued and handsome donations to the missionary treasury. Thus there is given before the face of the world, a practical and emphatic contradiction to the oft-repeated slander, that the slave of the Southern plantation is considered and treated as a mere chattel—a thing, and not a man—stripped of ethical character and moral responsibility. Who would ever dream of encouraging and praying for such a class of labours as your missionaries perform, unless he were prompted by a sense of duty to the souls of his dependents, and by the force of high moral and religious considerations?

These missionary operations have incidentally thrown light upon an ethnographical question which is attracting attention in various quarters of the scientific world. They have demonstrated, that whatever causes may have led to the deterioration of the African race in the scale of civilized nations, and whatever inferiority of mind and position may belong to it, when compared with other varieties of the human family, it nevertheless belongs to that family, in the highest human capabilities—those of religion. The adaptation of Christianity to the understanding and moral sentiments of the negro has been fully tested. A long-continued experiment has shown that the "gospel of the blessed God"—our Lord and Saviour Jesus Christ, is suited to him; comes down to his conscience; makes its eternal sanctions felt in his inner life; gives him the promise of pardon for his sins, the helps of the Divine Spirit for his infirmities, consolation for the troubles of the present life, and hope of the life everlasting of the world to come. While the idle fig-

ment of equality in outward condition has been exploded, and while it has pleased a wise Providence to stamp the ineffaceable traces of inequality upon the states and fortunes of mankind, the true philosophy of man's nature has been ascertained by the process which has developed his relations to God and futurity; shown his capabilities for religion; his possession of moral sense, reason, and responsibility, and proclaimed his inalienable title to a participation in that gospel which the divine Head of the church commanded to be preached to every creature.

"It is these religious aspects of the case which concern the Church of Christ, and which fix the attention and aim of this Missionary Society. The soul of the plantation negro, if he belong to the human race, is a priceless gem; the cost of its redemption was the blood of the great sacrifice for sin; and its inalienable right is the gospel, which, in accordance with its own great charter, is preached to the poor. Here we stand on solid ground."

We will also add here a quotation from a very able discourse on the Rights and the Duties of Masters, preached at the dedication of a church erected in Charleston, South Carolina, for the benefit and instruction of the coloured population in connection with the Second Presbyterian Church, by the Rev. J. H. Thornwell, D.D.:—

"With infidelity on the one hand, suggesting a short reply to the indictment of the world, that our negroes are not of the same blood with ourselves—a plea which, if it had been admitted, would have justly drawn down the curse of God, as well as the execrations of the race; with the dictates of a narrow expediency, on the other, suggesting that our safety depended upon the depression and still lower degradation of the black race: with Scylla on the one side, and Charybdis on the other, the wonder is that we have not been frightened from our propriety, and driven to the adoption of some measures that would seem to justify the censures of our enemies.

"The inception and successful progress of this enterprise encourage the hope that we mean to maintain our moderation. It is a public testimony to our faith that the negro is of one blood with ourselves—that he has sinned as we have, and that he has an equal interest with us in the great redemption. Science, falsely so called, may attempt to exclude him from the brotherhood of humanity. Men may be seeking eminence and distinction by arguments which link them with the brute; but the instinctive impulses of our nature, combined with the plainest declarations of the Word of God, lead us to recognise in his form and lineaments—in his moral, religious, and intellectual nature—the same humanity in which we glory as the image of God. We are not ashamed to call him our brother. The subjugation of the fears and jealousy which a systematic misrepresentation of religion, on the part of our inveterate opposers, has had a tendency to produce, is a public declaration to the world, that, in our philosophy, right is the highest expediency,

and obedience to God the firmest security of communities as well as individuals. We have not sought the protection of our property in the debasement of our species; we have not maintained our own interests in this world by the deliberate sacrifice of the eternal interests of the thousands who look to us for the way of salvation. Under the infallible conviction—infallible, because the offspring of the Word of God—that he who walketh uprightly walketh surely, we have endeavoured to carry out a plan which shall have the effect of rendering to our servants, in the most comprehensive sense, that which is just and equal."

As it regards the results of Foreign Missions generally, it is estimated that the number of missionaries who have been sent out to heathen nations within the last fifty years is two thousand. During this time, upwards of 7,000 native assistants have been employed in teaching and preaching the gospel. About 4,000 churches have been organized, whose aggregate members amount to nearly or quite 250,000. Three thousand missionary schools have been established, embracing 250,000 children; and all this where, fifty years ago, there was not a single scholar, a single church, a single convert, or a single missionary. The Scriptures have been published in two hundred languages and dialects, and may be read in languages spoken by six hundred millions of the inhabitants of the globe.

The Rev. William Hoffman, Principal of the Missionary Institution at Basle in Switzerland, and a Professor in the University of that town, has lately published a volume of lectures (in German) upon Missions. At the close of his first lecture he thus addresses those opponents of the cause who would taunt the missionary labourer with "want of success."

Some may say, "What have your missions effected? In truth, little enough: it is not worth the while to make fruitless attempts with increased means." To this I answer: Do you mean to say that the apostles laboured in vain? At the close of the first century of the Christian era, the number of *souls converted* to the gospel was estimated at *half a million;* and at this time, *the close of the first half century of combined evangelical efforts in the missionary field, the number of baptized heathens may be stated at half a million at the least!* I admit we have no apostles for helpers—nay, that the labourers are frequently half-educated persons and unlearned brethren; but to make amends, our missionary host amounts to one thousand and upwards, and of these, I am warranted in saying that you may select one tenth, who divide the gifts of one of the apostles among themselves, and do the work of that one.

"I cannot close," said Dr Duff, before the last Assembly, "without coming to one or two other points which have not yet been par-

ticularly referred to. And, first of all, I would meet one or two objections which have been made as to the state of Christianity in India. It has been alleged that there are no real Christians there. I would as soon believe that there are no hills in Scotland, or fish in the Firth of Forth. (Applause.) Every proof that man can look to, in reference to the characteristics of conversion, may be demonstrably found amongst numbers of our adherents in different parts of India, and particularly in our own mission."

CHAPTER VIII.

THE TWOFOLD CHARACTER OF THE QUESTION—SCIENTIFIC ARGUMENT.

Inductive philosophy is subservient both to natural and revealed religion. —POWELL.

Though science may often clash with religious errors, it cannot possibly be opposed to religious truth.—ETHNOLOGICAL JOURNAL.

Difficulties in particulars must not be allowed to interfere with the reception of general truths.—VILLIERS.

THE truth and certainty of the unity of the human races has now, we believe, been established as an incontrovertible fact. It rests upon the unmistakeable evidence of the infallible Word of God, who in the beginning made of one blood all the nations of men to dwell on all the face of the earth. It is supported also by presumptive arguments which are impregnable, against all the speculations and objections by which they may be assailed.

There is, however, another aspect in which the question of the unity of the human races may be viewed, and in which it becomes a scientific inquiry, and that is, as has been said, the question of fact regarding the present actual characteristics of the various races of men,—the extent and character of their differences,—the possibility of accounting for them by natural and existing causes,—the classification which these varieties require to be made of the races of men,—whether all these races ought to be considered varieties of one species or different species of one genus,—and finally, whether in the

case of any particular tribe of beings resembling man, such as the Dokos, &c., they are or are not to be admitted under the genus or the species *homo*, or are to be classed among some lower order.

These, we apprehend, and these alone, are the scientific boundaries of this question. The only province to which science can direct its efforts in this inquiry, is the discovery of truth, by the sole use of our reasoning faculties in deducing laws and causes from the facts experimentally and veritably before us.

In this view, all facts which come within the knowledge of our minds, whether by observation, experiment, or testimony, whether from the domain of history or philosophy,—"all facts which," as Doctor Morton says, "tend to establish analogies among men," are "evidently proper and necessary to the scientific determination of this question."

The conclusion, therefore, cannot scientifically be arrived at by the testimony of anatomy alone, or of physiology alone, or of ethnography alone, or of history alone, or of experience and observation alone,—but it can properly follow only from the examination of all the facts attested by all these sciences combined. The scientific argument on this subject is cumulative. It rests not upon any one line of proof, but upon every thing which bears upon the determination of the proposition that all the existing races of men possess—amid all their diversities—physical, intellectual, and moral—attributes which essentially belong to man, and which at the same time identify all men as belonging to one and the same species.

Are all men, therefore, of one and the same species? This is the first point to which, in a scientific aspect of this question, we are led, and to which we will now give our attention.

This question, however, involves several difficulties which occasion great obscurity, to which we must previously advert.

One source of this obscurity is man's compound nature, which is physical and spiritual. Abstractly considered, we

might regard these as entirely independent, so that the consideration of the one would not involve the other. We might thus imagine men not to be all of one species *morally*, and yet to be of the same species *physically*, or the reverse. And this is, in fact, the course pursued by many. In treating of man's specific character, they have regard only to his animal organization and nature. But while this might be permitted when the object is *merely* to accommodate the convenience of scientific analysis, yet when we come to speak of man practically, and in view of his relations to God and to his fellow-men, it is altogether inadmissible. "Man, as he is, as he lives, moves, acts, thinks, and wills, is not an animal. He is more, —inconceivably more. Every one must admit and feel that it is not in man's animal frame, exquisite as is its workmanship, that we find the most remarkable of the human phenomena. All must admit that there is in man an element remarkably distinct from all his other functions, an essence whose property is thought. What gives to this animal frame its chief importance is, that it is the shrine of that mysterious principle which lies hidden within—that volatile element which no chemist has been able to detect—that impalpable thing which has escaped the scalpel of the most minute anatomist—that which, itself invisible, gives to the eye all its diversified expression, revealing itself there in a thousand intimations,—which transfuses itself into the voice, inspiring its ever-changing intonations, and rendering it the conveyancer to others of the endless series of thoughts and feelings belonging to our personal consciousness, and which imparts to every variety of feature and gesture all that it has of life, and interest, and expression." Any determination of man's specific character and position in the scale of beings, therefore, which leaves out of mind that very nature which makes him what he is, we must protest against in the name of humanity, reason, and science. Let us then suppose that naturalists, for their own convenience, should arrange men into several species founded upon their colour and other phy-

sical peculiarities, this classification would not affect the question of their real and essential unity, *first* as descended originally from the same primeval pair, and *secondly*, as possessing the essential attributes of human nature perfect and entire. It would undoubtedly, if consistently carried out, lead to an entire change in the arrangements of zoology, so that all former classifications would be of no further use; but when once it came to be universally understood that the term *species* did not imply any relation whatever to original descent, or any other qualities than the physical peculiarities above alluded to, the question of real unity of nature between the different races of men would be left to be determined by its own proper evidence, species having no relation to it one way or the other.

On this supposition, any human fœtus which was found externally destitute of the marks included under the term *species*, would not belong to the species of man at all, though born of Christian and Caucasian parents. It might have a soul, and all the essential attributes of humanity as known to God, but not those selected for their arrangement by naturalists. Such a use of the term species would only have the effect of throwing the whole of zoological classification into confusion, by substituting the term *species* for the present term *variety*. It would, therefore, be both an unwise and useless change; *unwise* because it would disturb all existing classifications, and *useless* because it would leave the question of *origin* and of *nature* just where it is, to be decided as it must now be.

This, however, has not been the general sense of mankind. Origin and descent have hitherto guided mankind in determining, in every case, whether an individual who was destitute of external organs and qualities, or of internal faculties and powers—as in the case of the Abbot of St Martin—belonged to the species man, and were to be treated as human beings. And thus we perceive that the only question of real importance to men's social, moral, and political interest is

their common origin in Adam and Eve. This involves the equal relation of all men to those temporal and eternal interests in which they and their posterity are involved by reason of their relation to Adam, to God, and to the destinies of immortality. For even if naturalists should range mankind under different *species* but one *genus*, that generic character —which of course all the species *must* possess—would comprehend the ideas of reason, responsibility, and the relations specified above ;—and of this *generic* whole it would still be true, that all its members were originally descended from Adam and Eve, and that, however now diversified, they are one in origin, in duty, in danger, and in destiny.

NOTE.

THE CRETINS.

It will be both interesting and appropriate to append to this chapter the following interesting account, taken from the *New York Observer*, of the Cretins, as it will demonstrate the extent to which physical causes may affect the human form and the human being generally :—

"The unfortunate class of people called Cretins are still numerous in Europe, especially in Switzerland and in some valleys on the banks of the Danube. Travellers assure us that there are also men afflicted with *Cretinism* in some parts of America, as Guatimala and Colombia.

"First of all, a few words on Cretinism, and on the physical, intellectual, and moral state of the Cretins.

"Persons of high intellect are sometimes insane ; but the Cretin is affected with a kind of idiocy from his birth. His body exhibits hideous deformities. His face is rather brutish than human ; his forehead low ; the top of his head comes to a point ; the lower parts of his face are prominent ; he carries often attached to his neck an enormous goitre. His look is dull and stupid. He has thick lips, a large and flat nose, coarse hair.

"The Cretin remains motionless for many hours, without any consciousness of what is passing around him. Most of them cannot speak nor walk ; they only utter some inarticulate sounds.

They are unable to provide for their own wants; they must be fed, dressed, and carried like a babe. If they try to move, their step is tottering and uncertain. The senses of smelling, of hearing, of seeing, are blunted in them.

"As to their intellectual faculties, they are generally as little developed as their physical powers. They preserve a few confused instincts. They copy servilely the movements of those around them; but they understand nothing, or almost nothing, of words addressed to them. They seem sometimes to be capable of some affectionate feeling; but it is difficult to know whether they are conscious to themselves of their attachment. They pass with incredible quickness from gaiety to sadness, and from sadness to gaiety. They are governed in certain moments by brutal passions; but this excitement does not last long. The Cretins do not seem to have distinct ideas; they do not connect effects with their causes, and are absolutely unable to follow a train of reasoning. Their soul is a stranger to compassion.

"Some of them, however, have a little memory. They retain and repeat songs. There is a Cretin in Berne, named *Mind*, who has acquired the art of painting: he knows how to sketch pictures of animals, and particularly of cats, with rare fidelity. Others of them show some aptitude for the mechanic arts. They build for whole days card-houses, and seem to take a singular pleasure in contemplating these frail edifices. But ordinarily they do nothing, and seem as if deprived of all life.

"Whence the name *Cretins?* Several writers think that this term is derived from the word *Christian*, and justify this strange etymology as follows:—A popular superstition, respectable at least in its effects, regarded as a blessing from God the presence of a Cretin in a family. This poor, inoffensive being, unable to gain the means of livelihood, was, in the eyes of his relatives and neighbours, a *holy, sacred* object, which drew down the protection of heaven upon the house. He was a *Christian*—a being whom Jesus Christ had sent to call forth his father's and mother's charity. It is easy to understand that such an opinion must be protection for the unhappy people, sunk to the lowest degree of debasement.

"The number of Cretins has not diminished with the progress of civilization. The Swiss cantons of St Gall, of Valois, of the Grisons, of Uri, count them by hundreds. In a single small village there are thirty to fifty. It would seem that the moist and cold valleys, the marshy vapours, the want of circulation of air, the waters issuing from the snows, are the chief causes which produce Cretinism; for you meet with few or none out of certain well-defined limits.

"At last, a benevolent physician, Doctor Guggenbuhl, took pity on these poor creatures, and sought means to be useful to them. One day, in traversing the Alps, he had occasion to see an old

Cretin who uttered stammeringly the words of a prayer. This sight moved his sensibility, and decided the whole course of the doctor's life. He asked his conscience—'Are not these beings our brethren? Have they not an immortal soul like us? And since they have some idea of God, do they not deserve our sympathy and attention? If these Cretins should be from their infancy the object of regular and suitable treatment—if religion, charity, science, were employed to restore them from their abasement, is it not probable that some at least might be rescued from their wretched state? We devote assiduous cares and incessant pains to perfect breeds of animals, and shall we do nothing to form *men?* How inconsistent! I will try, with the blessing of God, and I hope that my efforts will not be wholly lost.'

"The rebuffs he met with from several parties did not discourage him. He said to himself continually that he was called to come to the aid of these Cretins, and that he should have lived to some good purpose, if he should succeed in founding an establishment for these outcasts from human society. After much inquiry and reflection, he opened at last a house upon the Abendberg, in the Bernese Oberland. You will doubtless read with interest some account of this institution, and of the kind of education there afforded.

"Medical men have observed that Cretinism never appears in regions at the height of 3000 feet above the level of the sea. Dr Guggenbuhl has set his establishment on a mountain which commands the valley of Interlaken, in one of the finest sites in Switzerland. Near the house are copious springs of pure water. A fine garden is formed for the use of Cretins. The buildings are well arranged; there is a large eating-room, a well-ventilated schoolroom, a farm attached to the establishment, &c. Nothing is expended upon luxuries, but all for convenience and comfort. It is remarkable that on this height the winter is sufficiently mild, because the Abendberg is on all sides surrounded by loftier mountains.

"The purity of the air forms the great remedy. 'The air of Abendberg,' says a traveller from whom we borrow this account, 'is an excellent specific against Cretinism; for this disease, which so changes the nature of man, must be subjected to the action of an element which produces a constant reaction. On the Abendberg, the sick breathe every moment this vivifying principle. The exhilarating air invigorates their nervous system, stimulates all their organs. Thus is effected a slow physical regeneration. Walking, gymnastic exercises, sports pursued in the open air, all concur to produce the most salutary effects.'

"It is very important that this new physical regimen be begun with the first years of life. Dr Guggenbuhl takes very small children, before they know how to walk. When the parents wait too long, the cure becomes almost impossible.

"Their food is carefully selected and dealt out to them. Generally, the Cretins have a ravenous appetite; they seek for what least suits them, and know nothing of temperance. The prudent physician uses his own reason and forethought for them. He accustoms them gradually to a simple, frugal, and substantial diet. In the spring, the children go every morning to cull plants on the Alps, which are good for the blood, and they soon acquire surprising vigour.

"But the physical development is only a preparation for intellectual and moral culture. Dr Guggenbuhl knows from long experience how much the welfare of the soul depends upon the healthy state of the body—*mens sana in corpore sano*, the ancients said. He waits till the physical powers are unfolded before beginning the education of the mind. The problem to be solved, in the case of Cretinism, is to maintain a constant balance between the physical and the mental development of the man.

"It is a touching sight to look upon a group of little Cretins under the eye of their master. Dr Guggenbuhl begins by exercising the organs of sense. He employs for this purpose colours, painting, music. He tries especially to teach them to articulate words distinctly. It is a curious fact, but not surprising to religious men, that the faculty of speaking developes itself in the Cretins just in proportion to the degree of their intelligence. While sunk in brutishness, they remain wholly dumb, or utter merely hoarse cries like animals. But when they begin to conceive some thoughts, they acquire at the same time, and to the same degree, the gift of speech;—a new and incontestable proof that the faculty of speech is owing, not to a physical cause, not to the superiority of our organs only, but to an immaterial principle, to the soul which God has put in man!

"The young Cretins learn gradually to pronounce the names of the surrounding mountains; afterwards they form sentences, and accustom themselves to express their thoughts. Some succeed even in studying grammar, and learn to write. Religious instruction has its place. Some Protestant deaconnesses, attached to the establishment, show in this religious instruction an admirable devotedness, and I am happy to add that they have obtained results which exceed all hope. The idea of God—of salvation by Jesus Christ—of pardon offered us in the gospel—of eternity;—all the great doctrines of revelation are received and understood by these children. I do not say, indeed, that the Cretins become learned theologians; but they know enough of religion to pray to God, to expect from him peace, the salvation of their souls; and what do they need more?

"Several Cretins have left the establishment of Abendberg, after passing their childhood under Dr Guggenbuhl's care. Their physical and moral faculties were so well unfolded, that they could un-

dertake some useful labour. Each of these youths has adopted a trade, a pursuit adapted to his taste, and without being as intelligent as ordinary persons, they are capable of being useful.

"Honour to Dr Guggenbuhl! The names of such noble benefactors of mankind deserve to be known over the globe. Already the Cantons of Friburg, of Berne, of Valois, of St Gall, have shown their respect for this restorer of a disinherited race, by sending young Cretins to his establishment at the expense of the public treasury. The cities of London, Hamburg, and Amsterdam, have associations which correspond with Dr Guggenbuhl. The work has only begun—it must grow with time. Perhaps the scourge of Cretinism will be removed, under the divine blessing, by modern science, by Christian charity."

M. Grange, of the Academy, has made further researches on the subject of goître. He journeyed to Turin; and on comparing notes with the savans of that city, ascertained the remarkable fact, that a geological map of Piedmont, and a *goître map* of the same country, fully confirm his views respecting "the presence of goître and cretinism on magnesian formations." He shows that in the valley of Aosta, where the soil is schistous, with a layer of diluvium, and dominated by metamorphic rocks, goître is rare; but beyond Bard, where the water becomes purgative, from the large amount of sulphate of magnesia which it contains, goître and Cretinism abound. In the valley of Entremont there is a small district, a sort of oasis, as it were, of mica schist, on which five villages and several hamlets are built, in none of which do the distressing diseases ever appear, while they prevail in the surrounding localities.

Another sanitary fact is related by M. Ancelon. In Meurthe there is a village named Lindre Basse, where endemics are constant, appearing as intermittent and typhoid fevers, the latter at intervals of three months; besides which, other affections prevailed, caused by miasmatic influence. Close to the village was a large pond, which was kept full for two years for the breeding of fish, and then emptied, to allow of the land, which had been submerged, being cultivated in the third year; after which it was again refilled, and the process repeated. In the first year of the cycle came the intermittent fevers; in the second, the typhoids; in the third, the miasmatic. The practice was interrupted in 1848–49, when, instead of emptying the pond as usual, the proprietor kept it on the increase, until the whole valley was overspread with water several inches in depth for a distance of about six miles. This change produced an alteration in the development of disease. The miasmatic affections did not appear, but the whole country was infested with intermittent fevers, which seemed to repel or absorb all other complaints—the cholera even stopped at the edge of the marshy land. M. Ancelon considers that the statement of these facts will assist in the study of cause and effect as regards disease.

CHAPTER IX.

THE NATURE AND PHILOSOPHY OF SPECIES.

Species serves to form the groundwork of science. We discriminate things in a loose or general manner by saying that they are of the animal or vegetable kind; of the canine or feline kind. But we discriminate them precisely if we say that they are a species of arbutus, of the pomegranate, of the dog, the horse, and the like.—CRABBE'S SYNONYMES.

The essence of any being is that internal constitution or frame or modification of the substance, which God in his good pleasure thinks fit to give to every particular creature when he gives a being.—LOCKE.

WE have considered the twofold character of this inquiry, and the obscurity arising from the twofold nature of man. But another source of obscurity is found in the very indeterminate character of the term species.

The word species, from *specio*, to behold, signifies literally the form or appearance, and hence it denotes a class or division causing the same or similar sensations to the sight, having or showing the same particular and discriminating qualities.

This term, like that of *genus*, is used in a popular, in a logical, and in a zoological sense. In the *popular* sense, the term species means any class either of subjects or of objects which are included under a more general class. Thus a mathematician is a species of man. Justice, prudence, courage, &c., are species of the genus virtue. Species is in this sense synonymous with kind, as when sweet, sour, and salt tastes, are spoken of as species of taste. The word man, in this use of the word, refers to all beings who have a certain form and

rationality, and has no reference to the teeth or other zoological properties. In this popular sense, the same thing may be a *genus* with reference to the sub-classes or species included in it, and a species in reference to a more comprehensive class; as, for instance, animal in reference to man and brute on the one hand, and to organized being on the other. And hence it will be seen that, in this sense, there may be different kinds or species, where there is no difference zoologically or physiologically.

In its *logical* sense, the term species signifies any class, of whatever nature, which is distinguished from all other classes by an indeterminate multitude of properties not derivable from another class, and which is not divisible into other kinds. In this sense, species is a general name, grounded not upon the attributes it connotes, but the kind or class referred to; or, in other words, the relation which it bears to the subject of which it happens to be predicated. Logically considered, therefore, species and genus are no real things existing independent of our thoughts, but are the creatures of our own minds. When several individuals are observed to resemble each other in some one point, a common name may be assigned to them denoting that point, and distinguishing them from all others. And as we may select at pleasure the circumstances that we choose to abstract, we may thus refer the same individual to several different species. The measure and boundary by which we constitute a species or particular sort, includes all those ideas regarded as essential for the purpose in view. These together form the complex idea to which we give, in the case now under consideration, the name man. Thus, when we say voluntary motion, sense, and reason, constitute man, then these alone form the essence and standard of the species of man. Only that which is thus made necessary to the general idea of man, therefore, is necessary to determine the species of any race of beings, since we find many of the individuals that are ranked as one sort, called by one common name, and so received as being of one

species, have yet qualities depending on their real constitutions, as far different one from another as from others from which they are accounted to differ specially. A species is determined therefore logically, not by the real or entire nature of the object, which can be known only by God, but by certain qualifications which are conventionally regarded as necessary to enrol it under the same general division.

The *essential* characteristics of species can therefore be known only by God. Man can know only the outward qualities. "God alone," says Locke, "can know that constitution of man from which his faculties of moving, sensation, and reasoning, and other powers flow, and on which his regular shape depends."

Things, therefore, which are in themselves essentially alike, may be classed logically under different species, and things essentially different may be arranged under the same species. We might, therefore, *logically* divide men into a number of species according to the poetical, oratorical, imaginative, logical, or active characteristics by which they are distinguished from one another,—or into the white, the red, the yellow, and the black,—or into the bearded and the beardless,—or into the civilized and uncivilized,—and yet determine nothing respecting their unity of origin, of essence, or of destiny.

It is very different, however, when we come to speak of the term species *zoologically*. Each science or art forms its classification of things according to the properties which fall within its special cognizance, or of which it must take account in order to accomplish its peculiar practical ends. The divisions of the agriculturist, the geologist, and the naturalist, are, therefore, widely different, both in their nature, names, and ends.

"A nomenclature," says Mill, "may be defined, the collection of names of all the kinds with which any branch of knowledge is conversant, or more properly of all the lowest kinds or *infimæ species*,—that is, those which may be subdi-

vided indeed, but not into kinds, and which generally accord with what in natural history are termed simply *species*. Science possesses two splendid examples of a systematic nomenclature; that of plants and animals, constructed by Linnæus and his successors, and that of chemistry, which we owe to the illustrious group of chemists who flourished in France towards the close of the eighteenth century. In these two departments not only has every known species, or lowest kind, a name assigned to it, but when new lowest kinds are discovered, names are at once given to them upon a uniform principle. In other sciences the nomenclature is not, at present, constructed upon any system, either because the species to be named are not numerous enough to require one (as in geometry, for example), or because no one has yet suggested a suitable principle for such a system, as in mineralogy; in which the want of a scientifically constructed nomenclature is now the principal cause which retards the progress of the science."

It will be important to dwell a little on this point, in order to meet the objection that there is no possibility of determining what constitutes a species.

The ancients made species include the essence of the subject. With them man was the lowest species, and further divisions into which man might be broken down, as into white, black, and red, they did not admit to be species.*

Among the schoolmen, differences which extend to a certain property or properties, and there terminated, they considered as differences only in the accidents of things; but when any class differed from other things by an infinite series of differences, known and unknown, they considered the distinction as one of kind, and spoke of it as being an essential difference.

Zoological classes are not, therefore, conventional, arbitrary, abstract terms, but are based upon the truth thus always known—though very obscurely and incorrectly worded

* Mill's Logic, p. 82.

—that "there are in nature distinctions of kind—distinctions not consisting in a given number of definite properties, plus the effects which follow from those properties, but running through the whole nature—through the attributes generally, of the things so distinguished."

The groups of naturalists do not, therefore, depend on arbitrary choice. "They are determined," says Mill, "by characters which are not arbitrary. The problem is, to find a few definite characters which will point to the multitude of indefinite ones. Kinds are classes between which there is an impassable barrier; and what we have to seek is, marks whereby we may determine on which side the barrier an object takes its place. The characters which will best do this are what should be chosen. If they are also important in themselves, so much the better. When we have selected the characters, we parcel out the objects according to those characters." *

"The end of classifications, as an instrument for the investigation of nature, is (as before stated) to make us think of those objects together, which have the greatest number of important common properties; and which, therefore, we have oftenest occasion, in the course of our inductions, for taking into joint consideration. Our ideas of objects are thus brought into the order most conducive to the successful prosecution of inductive inquiries generally."

To constitute, therefore, a class of natural objects properly, we must take into consideration all the varieties of existing objects, and the exact place of the plants and animals thus classified in a general division of nature. The *whole* of the properties and relations of these objects must also be taken into account, "those attributes being regarded as the most important which contribute, either by themselves or by their effects, to render the things like one another and unlike other things; which give to the class composed of them the most marked individuality; which fill, as it were, the largest space

* See also Martin's Natural History of Man and Monkey, p. 179, &c.

in their existence, and would most impress the attention of a spectator who knew all their properties, but was not specially interested in any. Classes formed in this manner may be called, in a more emphatic manner than any other, natural groups." "The properties according to which objects are classified, should, therefore, if possible, be those which are causes of many other properties; or, at any rate, such as are sure marks of them. *Causes* are preferable, both as being the surest and most direct of marks, and as being themselves the property which is the cause of the chief peculiarities of a class. But this is unfortunately seldom fitted to serve also as the diagnostic of the class. Instead of the cause, we must generally select some of its more prominent effects, which may serve as marks of the other effects, and of the cause itself."

It is evident, from these observations, that every species must be distinguished from all other classes by an indeterminate multitude of properties not derivable from another. Species must also be the lowest kind; so that any lower division would be founded not upon *essential*, but upon *definite* distinctions—not pointing (apart from what may be known of their causes or effects) to any difference beyond themselves. Species does not, therefore, exclude—but, on the contrary, implies—the existence of many individual and family differences. The members of a species have only in common a limited number of characters. It is only necessary that these characters should be important, and that the objects contained in the species should resemble each other more than they resemble any thing which is excluded from the species.

To make *definite* distinctions, which are not distinctions in *kind* or essence, the grounds of separating objects from a species, is therefore inadmissible in any scientific classification. For, "since the common properties of a true kind, and consequently the general assertions which can be made respecting it, or which are certain to be made hereafter as our knowledge extends, are indefinite and inexhaustible; and since the very

first principle of natural classification is that of forming the classes, so that the objects composing each may have the greatest number of properties in common; this principle prescribes that every such classification shall recognise and adopt into itself all distinctions of kind which exist among the objects it professes to classify. To pass over any distinction of kind, and substitute definite distinctions, which, however considerable they may be, do not point to ulterior, unknown differences, would be to replace classes with *more* by classes with *fewer* attributes in common, and would be subversive of the natural method of classification."

Many differences in animals arise from modifications of the mysterious principle of life, and from the intermixture of the effects of incidental causes peculiar to the nature of each. Thus in man, for example (the species in which both the phenomenon of animal and that of organic life exist in the highest degree), many subordinate phenomena develop themselves in the course of his animated existence, which the inferior varieties of animals do not show. The properties which are made the characteristics of a species must therefore be not only differences, but differences which are essential, and which belong to it universally and constantly.

In *zoology*, accordingly, it is a fixed principle—founded upon the indefinite varieties of which animal life is capable—that common parentage, where this can possibly be traced, is a certain and infallible criterion of species.

"The species of plants," says Mill, "are not only real kinds, but are probably all of them real lowest kinds, or *infimæ species*. I say probably, not certainly; because this is not the consideration by which a botanist determines what shall or shall not be admitted as a species. In natural history, those objects belong to the same species which, consistently with experience, might have been produced from the same stock. But this distinction in most, and probably all cases, happily accords with the other. It seems to be a law of physiology that animals and plants do really, in the philo-

sophical as well as the popular sense, propagate their kind; transmitting to their descendants all the distinctions of kind (down to the most special or lowest kind) which they themselves possess."

On this point, Archbishop Whately is equally positive. When applied to organized beings, he says, "The term species is always applied (when we are speaking strictly as naturalists) to such individuals as are supposed to be descended from a common stock, or which might have so descended; viz., which resemble one another, to use M. Cuvier's expression, as much as those of the same stock do. Now, this being a point on which all—not merely naturalists—are agreed, and since it is a fact (whether an ascertained fact or not) that such and such individuals are or are not thus connected, it follows that every question whether a certain individual, animal, or plant belongs to a certain species or not, is a question not of mere arrangement, but of fact. If, for instance, it were disputed whether the African and the Asiatic elephant are distinct species, or merely varieties, it would be manifest that the question is one of fact; since both would allow that if they are descended (or might have descended) from the same stock, they are of the same species, and, if otherwise, of two; this is the fact which they endeavour to ascertain, by such indications as are to be found." . . . "In the 'infimæ species,' according to the view of a naturalist, of plants and animals, the differentia which constitutes each species, includes in it a circumstance which cannot often be directly ascertained (viz., the being sprung from the same stock), but which we conjecture from certain circumstances of resemblance; so that the marks by which a species is known are not, in truth, the whole of the differentia itself, but indications of the existence of that differentia; viz., indications of descent from a common stock." *

Dr Latham also takes the same ground. "The definition of the term species," he says,† "by means of the idea of de-

* See Logic. See also Carpenter's Physiology, pp. 76, 77.

† P. 510, part iii.

scent from a single protoplast, has the advantage of being permanent and immutable; inasmuch as it is based upon a ground that no subsequent change can set aside.

> '——— Non tamen irritum
> Diffinget, infectumque reddet
> Quod fugiens semel hora vexit.'

On the other hand, the proof of the original descent is an inference, rather than a fact either ascertained or capable of being so.

"The definition of the term species upon the grounds of constancy of characters, has the advantage of being founded upon a fact capable of being ascertained. On the other hand, the induction which proves it may disprove it also. The same applies to those definitions of the term wherein the phenomena of hybridism plays a part.

"The balance of inconveniences is, in the mind of the present writer, in favour of the idea of descent determining the meaning of the word species—for human natural history at least.

"Hence, a species is a class of individuals, each of which is hypothetically considered to be descended of the same protoplast, or of the same pair of protoplasts.

"A multiplicity of protoplasts for a single species is a contradiction in terms. If two or more such individuals (or pairs), as like as the two Dromios, were the several classes of organized beings (the present numbers being as like each other as their first ancestors were), the phenomenon would be, the existence in nature of more than one undistinguishable species—not the existence of more than one protoplast to a single species."

Wherever, therefore, there is reason to believe that organized beings are of the same stock, all differences, whether individual or collective, are regarded as accidental varieties. "Under this term," says Mill, "are included all attributes of a thing which are neither involved in the signification of the name (whether ordinarily or as a term of art), nor have, so

far as we know, any necessary connection with attributes which are so involved. They are commonly divided into separable and inseparable accidents. Inseparable accidents are those which—although we know of no connection between them and the attributes constitutive of the species, and although, so far as we are aware, they might be absent without making the name inapplicable, and the species a different species—are yet never in fact known to be absent. A concise mode of expressing the same meaning is, that inseparable accidents are properties which are universal to the species but not necessary to it. Thus blackness is an attribute of a crow, and so far as we know, a universal one. But if we were to discover a race of white birds, in other respects resembling crows, we should not say, these are not crows; we should say, these are white crows. Crows, therefore, do not connote blackness; nor from any of the attributes which it does connote, whether as a word in popular use or as a term of art, could blackness be inferred. Not only, therefore, can we conceive a white crow, but we know of no reason why such an animal should not exist. Since, however, none but black crows are known to exist, blackness in the present state of our knowledge ranks as an accident, but an inseparable accident, of the species crow.* *Separable accidents* are those

* "On Saturday forenoon, some of the farm servants at Friarton observed, to their surprise, while at work, the largest number of swallows they ever saw collected together, amounting apparently to some thousands, pursuing some object in the air. Their attention was directed to discover the cause of the extraordinary meeting, as by their uncommon gyrations and peculiar cries something strange must have happened among them. At last they occasionally noticed among the dark mass something like a white speck upon wing, about which they were whirling in the manner they do about their enemy the hawk. One of the servants went for a gun, and after following the swallows a considerable distance, succeeded in shooting the object of their attraction, which turned out to be a white swallow! There is no doubt the little strange-coloured fellow would have been killed by his tribe, for it was observed that violence was accompanied to a great extent with the amusement indicated by the darker brethren of his species. White crows and white blackbirds have occasionally been found, but this

which are found in point of fact to be sometimes absent from the species; which are not only not necessary, but not universal. They are such as do not belong to every individual of the species, but only some individuals; or if to all, not at all times. Thus, the colour of a European is one of the separable accidents of the species man, because it is not an attribute of all human creatures. Being born is a separable accident of the species man, because although an attribute of all human beings, it is so only at one particular time. *A fortiori*, those attributes which are not constant even in the same individual, so as to be in one or in another place, to be hot or cold, sitting or walking, must be ranked as separable accidents.

is the first case of a white swallow we have heard of. It is to be seen in Mr Lamb's bird-stuffing establishment."—*Perth Courier.*

CHAPTER X.

THE UNITY OF THE RACES PROVED BY THE UNITY OF THE SPECIES.

The apparent indefiniteness and inconsistency of the classifications and definitions of Natural History belongs, in a far higher degree, to all other except mathematical speculations.—MILL'S LOGIC.

Aliquem humanâ specie et figurâ, qui immanitate bestias viceret.—CICERO.

WE are now brought to the question of fact, whether, upon the principles we have elucidated, zoologists have been, or can properly be, led to make such differences as confessedly exist among men to be marks of different species; and whether among higher animals specific character has been regarded as presumptive proof of the unity of origin.

In reply to these queries, we venture to affirm that every mark which has ever been laid down by naturalists to distinguish one species of animals from another, proves, when applied to man, that all the varieties of the human family are of one species, and that these marks are equally conclusive in determining that there is a fixed and impassable boundary separating men from all other animals.

"We have shown," says Dr Bachman, "that all the varieties evidence a complete and minute correspondence in the number of the teeth and in the 208 additional bones contained in the body.

"That in the peculiarity in the shedding of the teeth, so different from all other animals, they all correspond.

"That they are perfectly alike in the following particulars:

"In all possessing the same erect stature.

"In the articulation of the head with the spinal column.

"In the possession of two hands.

"In the absence of the intermaxillary bone.

"In the teeth of equal length.

"In a smooth skin of the body, and the head covered with hair.

"In the number and arrangement of the muscles in every part of the body, the digestive and all the other organs.

"In the organs of speech and the power of singing.

"They all possess mental faculties, conscience, and entertain the hope of immortality. It is scarcely necessary to add, that in these two last characteristics man is placed at such an immeasurable distance above the brute creation, as to destroy every vestige of affinity to the monkey or any other genus or species.

"They are all omnivorous, and are capable of living on all kinds of food.

"They are capable of inhabiting all climates.

"They all possess a slower growth than any other animal, and are later in arriving at puberty.

"A peculiarity in the physical constitution of the female, differing from all the other mammalians.

"All the races have the same period of gestation, on an average produce the same number of young, and are subject to similar diseases."

In these and similar facts, therefore, a certain answer may be found to our inquiry, and that answer is, that MEN ARE ALL OF ONE AND THE SAME SPECIES as well as of one and the same *genus* and *order*. They constitute an assemblage of individuals descended from common parents, which bear as great a resemblance to them as they do to each other, and have fixed forms which, though to a certain extent alterable, are handed down essentially unimpaired from generation to generation. "If, then, the term '*species*,'" says the Encyclopedia Americana, "is used in its common scientific sense, it cannot be denied that there is but one species of men." The dispute on

this subject, the same authority pronounces to be a dispute of words, founded upon an effort to subvert the established rules, and the received and well-known meaning of natural science. There are undoubtedly certain and constant differences among men—of stature, physiognomy, colour, nature of the hair, and form of the skull, pelvis, and heel bone. But the most opposite extremes in these varieties are connected together, and intermingled, and gradually brought together by numerous gradations. And in every character important and essential to the being of man, as distinguished from other animals, all men are precisely alike, and capable of uniform, invariable, and permanent continuance by natural propagation.

The differences found in all the races of men are distinctions, not of *kind* running through the whole nature and attributes of man, but are what are termed definite properties. There is no impassable barrier between the different races. These are found, on the contrary, to run into one another by insensible gradations. Their differences are not, therefore, essential, because they do not distinguish each several race from every other by an indeterminate multitude of properties not derivable from any other. They are not *lowest kinds;* for if these differences constitute species, then it will be true, as we have heard it affirmed, and that, too, by a naturalist (who, of course, opposed our views), that every several child in the same family and of the same parents, and every member of the same community, is a distinct species.

These differences, we would further observe, do not constitute species, because, notwithstanding them, all the races of men resemble each other far more than they do any other animals. These differences are not involved in the signification of man—they have no *necessary* connection with the attributes which jointly form that signification. They are, therefore, either separable or inseparable accidents. They might all be conceived to exist in the case of individuals of the other races without altering their specific character. An American man would not cease to be such though he should

become, by some mysterious process, dark in colour; or because he had a badly-shaped head, prominent jaws, some bones comparatively long, and a feeble intellect. These are not the attributes which enter into the idea of an American or a Caucasian man. If all these were found united in one individual, they would be regarded as very extraordinary; but their existence separately and in modified degrees, is what we observe daily among the various European races found among us. The existence, therefore, of these peculiarities in innumerable variety of degrees among different tribes of men, cannot constitute them different species from other men with whom they hold in common all the peculiarly human characteristics we have described. In their structure, in their physiology, and in all the laws of their being, the black races are uniform with the white and the yellow races of man, and different from all other animals. They are all, therefore, of one and the same species, and these differences must be accidental, though permanent peculiarities, and are not essential or specific. "I have likewise," says Prichard, "in a separate chapter, compared the physiological characters of different tribes, having first, by a tolerably extensive induction, established the fact that between different species, properly so termed, there are in general strongly-marked diversities with relation to the great laws of the animal economy, and that each species has a distinct physiological character. The conclusion which evidently resulted was, that no differences such as those above described are to be found among human families, and that whatever exist in these respects are the effects of external agencies, and the tendency to variations which such agencies call into activity."

Species do not, it must be remembered, exclude differences, but, on the contrary, as we have seen, necessarily imply their existence. Variation is the inevitable and designed result of individual life, and is found characteristic of members of the same family and class and tribe, and even of every seed-plot, throughout all animated nature. And not only is variety the

law of nature and of life, it is the law of nature that this difference should be multiplied in exact proportion to the capacity of the individual being for such variation. Since therefore man, of all organized beings, is most capable of change, because he is possessed of life in its highest development, man is also the most liable to variations. Every man, therefore, possesses not only that real internal constitution which is of the same identical human kind with all other men, but he has besides this an individual and characteristic nature peculiar in its essential character to him alone, and different from that of all other men, and by which he is distinguished, both in body and in mind, from all other men. And it will be found, we think, on a moment's consideration, that these individual peculiarities are as great, if not greater, than those general varieties which characterize particular races of men. If, therefore, peculiar and striking differences in colour, in form, in height, in structure, in voice, in brain, in disposition, in mind, in every thing, are adequate grounds for specific distinctions, then we must divide man into as many species as there are human beings.

Specific distinctions are constant and universal. But "all the varieties of men have," as Hamilton Smith admits, "a tendency to pass to the highest standard rather than to a lower condition, or to remain stationary." They are not, therefore, of different species, but of one and the same.

The variations found among the different races of men are not greater, or as great, as those found among other animals of the same species, and therefore they do not prove them to be different species. "Every vertebrated animal," says Dr Bachman, "from the horse down to the Canary bird and gold-fish, is subject, in a state of domestication, to very great and striking varieties, and in the majority of species these varieties are much greater than are exhibited in any of the numerous varieties of the human races. Taking it for granted," he adds, "that they admit, that in our examination of man as a species, we must be governed by the same laws by which we

examine all the species of animals in a domesticated state—they who have made this issue and denied the long-received doctrine of the unity of the human race, are now required to show those characteristics which will justify us in regarding the varieties of men as distinct species, whilst they consider those of animals equally striking, not as species, but mere varieties."

Dr Bachman proceeds to detail the extraordinary variations which have arisen in the wolf, and then asks—"Are all these strangely-marked varieties which are permanent in certain regions where each propagates its own variety, and has done so from our earliest knowledge, but every where associating and multiplying with neighbouring varieties, to be regarded as miraculous creations of separate species; or are we not able to trace all these variations to the original constitution of the wolf, adapting it to the various climates and situations in which it takes up its residence, and to its instinctive impulses to a wandering and migratory life? Are there any more distinctive marks in the skulls, in the colours, and in the habits of the varieties of man than are found in those of the wolves? And if not, what reasons can naturalists assign for admitting the races of wolves as mere varieties, and yet insisting that the races of men are distinct species?"

Dr Bachman proceeds to the examination of domestic animals; and of the horse he asks:—"Will the advocates of a plurality of species in men point out those distinctive marks which would make the various races of horses of all sizes, forms, and colours, each propagating its own kind when kept separate, as only varieties, and yet insist that the varieties of men are distinct species?" Dr Bachman then takes up the cow, and having pointed out its differences, asks—"If men are of all colours, black, brown, red, and white, so are these cattle. If the various races of men are all prolific with each other, so are the varieties of cattle. If they differ in their skulls, these cattle differ from each other much more, not

only in skull, but in the size of their ears, length of tail, in height, and in form of body. If they will make five, ten, or a hundred species of men, why do they not carry out their principles, and make five, ten, or a hundred species of common cows, their varieties being fully as numerous, their breeds as permanent, and their characteristics as various as those found in the human species?"

Then he points out the variations among swine, of sheep, of the dog, of our common fowl, of the turkey, of the goose, of the duck, and of the pigeon, of the guinea-pig, of the dove. "By the rules," he argues, "which govern naturalists in their designation of domesticated species, the varieties of these animals are all regarded as one species, and no naturalist would risk his reputation in pronouncing a different decision. Are not, we ask, these varieties as permanent and as widely-separated as are the varieties of men? And if we cannot separate the races of common fowls, turkeys, geese, or ducks, what authority have we for separating the races of men into different species?

"Since, therefore, naturalists cannot establish a rule for the designation of one species or variety of domestic man, which they should not be willing to apply to the varieties of domesticated animals, we would ask them to point out those distinctive characters by which the varieties of men are divided into many species, and the varieties of the pigeon, for instance, are all included under one species?

"We may conjecture," adds Dr Bachman, "what will be their reply to these questions. They will inform us, that although the varieties are as striking and as permanent in character as are those in the races of men, yet, as we know that the former have originated from well-known species, and some in our day, they cannot, therefore, be mistaken in setting them down as mere varieties; but as they cannot trace the origin of the human races to their original source, therefore they will regard them as different species. But we ask, Is not this one of those arguments which is not ad-

missible? Is not this depending more on the history of a species, as far as our imperfect knowledge extends, than on those distinctive marks which are stamped upon the races themselves? Would not this uncertain mode of deciding on species throw the science of natural history into inextricable confusion? You would here place a dependence on uncertain tradition, whilst the characteristics which nature presents—the only guides to truth in matters of science—are abandoned."

But if we appeal to other animals for analogical proof that changes as great and as manifold as those which occur in man, occur also in animals, not as capable or liable to changes as he is, we present a difficulty in the way of our conclusion. For while, it may be argued, in other animals there are many species under one genus, in man we contend for a single species, as well as a single genus. To this it may be replied, that were the fact so, it would be of no force; because it would only show man's supremacy above all other animals. But the fact is not so. "In this," says Dr Bachman, "man does not form an exception to the general law of nature. There are many of our genera which contain but a single species in the genus. Among American quadrupeds, the musk ox (*Ovibos moschutos*), the beaver (*Castor fiber*), and the glutton or wolverine (*Gulo luscus*); and, among birds, the wild turkey (*Meleagris gallipavo*), are familiar examples. The oscillated turkey, which was formerly regarded as a second species, has recently been discovered not to be a true turkey. In addition to its different conformation, it makes its nest on trees, and lays only two eggs; possessing in this and other particulars the habits of the pigeon." To these he adds the horse, "the only true species in the genus; for naturalists have now included all the others under the asses and zebras, and also the beaver."

But further, to what confusion and injury to science must any attempt to distort the established classification of mankind under one species necessarily lead? Hamilton Smith

admits that the supposition of a plural creation of several single species of man requires "the term species to assume a different acceptation, and that it confounds the notions hitherto attached to it." This *reductio ad absurdum*, we have already seen, is urged by the "Encyclopedia Americana;" and that the theory of a plurality of human *species* can be maintained only by a total alteration of the established zoological meaning of the term species, we have made certain by the authority of Whately and Mill, who base their opinion upon the very great personal knowledge of the subject, and upon the elaborate analysis of Le Comte into this subject.*

"The opponents of the unity of the human race cannot, therefore," says Dr Bachman, "fail to perceive that the position they have assumed is surrounded with infinite difficulty —that, in order to establish their views, they must overturn all the principles which science has adopted for the designation of species—and that in departing from our ancient landmarks, which have hitherto enabled us to decide with accuracy on the character of species, they would not only demolish the simple and beautiful temple reared by the labour of Linnæus, Cuvier, and their coadjutors, but would scatter the very materials to the winds, and leave us with no other guides than those of uncertain conjecture. The new and obscure path in which they have invited us to tread, is opposed to our views of science. A vast majority of naturalists disclaim them as leaders, and will leave them to pursue their journey alone, whilst we are content to follow the safe and long-trodden paths."

This last consideration we would press upon the special attention of our readers. The host of eminent men entitled to speak *authoritatively* on this subject, and who maintain the unity of the human races, has been already given, together

* Mr Pickering says species are found to have a certain geological range; and, notwithstanding a few instances of wide diffusion, nature has not reproduced a species in different quarters of the globe. (P. 303.) A very decided change may take place in the aspect, without a specific difference. (P. 505.) Varieties do not revert to the original type. (P. 305.)

with those who have opposed it. All naturalists who have described vertebrated animals arrange mankind under one species. They have, therefore, decided the question; and, as Dr Bachman says, who is entitled to speak on the subject *ex cathedra*, "Those who are now entering into the field, about whose qualifications, as judges, the world as yet knows nothing, and is therefore unprepared to pronounce an opinion, are bound to give some satisfactory reasons for their dissent."

But this novel theory would not only overwhelm the science of natural history in confusion—it would rush to its conclusion over the principles of all true science. These principles forbid the introduction of more causes than are necessary to account for the phenomena; and they forbid an appeal to supernatural causes when not peremptorily demanded by the facts of the case. Now, "the creation of species is an act of divine power alone, and cannot be effected by any other means. Those who believe the varieties of men and other animals mentioned to be of different species, believe that they were created distinct species. Rather than believe that all those variations have proceeded from an original constitution of nature, adapted to various climates and situations, these writers would thus multiply indefinitely, and probably at sundry times, the necessity for the direct interposition of a miraculous and creating power."

"It is not, indeed, self-evident," to use the words of Dr Prichard, "if we suppose it to be conceded that all human races are of one species, technically so termed, that they are not distinguished from each other by characters ever constant and immutable, and such as cannot have been produced in a breed or race which had been previously destitute of them; and the question still remains, What is the proof that all races actually descended from one stock or parentage? It is not self-evident that many families of the same species were not created at first, to supply at once with human as well as with other organized beings, various regions of the earth. This, indeed, is improbable, when we take into account the

almost universally rapid increase of living species, and the surprising efficacy of the means every where contrived by nature, both for their multiplication and dispersion, which would seem to be superfluous, or at least much greater than would be requisite, on the hypothesis that a multitude of each tribe existed from the beginning."

"It has been observed, in both the animal and the vegetable kingdoms, that while tribes of the most simple structure are spread in the present time, and appear to have been originally diffused over the most distant regions, races of a higher and more elaborate organization exist only in places to which it is not generally obvious, but always probable, that they may have obtained access from some particular spot, apparently the local centre and primitive inhabitants of the tribe. Hence, we derive each tribe among the higher and more perfectly organized creatures, whether locomotive or fixed, whether animals or plants, from some original point and from a single stock. We are *a fortiori* at liberty to apply this conclusion to the instance of the human species, so as to infer that the law of nature, otherwise universal or very general in its prevalence, has not been in this case transgressed, where such an exception would be of all cases the most improbable."

One other point may be here adverted to, and that is, the consideration that different animals and plants, and different species of the same genus, are infested by worms or insects peculiar to themselves, and by which their genus and species may be determined. On this ground an argument has been based against the unity of the human races, from the supposed fact that parasites of the races are different. But to this it is replied, that the horse and the ox are known to have different insect parasites and assailants in different climates. Into this subject, also, Dr Bachman enters fully; and, after considering the facts known respecting the twenty-one species found in different parts of man's system, he concludes that they infest equally the white and the black races, and that

there is in fact no difference in the species found in different races. In reference to lice, he says, "Two species of pendiculi existing on the surface of the body, we have examined and compared. We are aware that a species was described as existing on the African under the name of P. nigratarum. We have not recently seen the description, which we believe was given by Fabricius. We presume it is the same as is at present found among our negroes. It is darker in colour than that on white persons. This, however, is the only difference. We suspect the colouring matter under the human skin imparts this deeper shade to the insect. In the mulatto, its colour is intermediate. We have found the two species, P. humanis et P. ubis—the only ones we have had the opportunities of comparing with the microscope, in the white race and the negro —frequently exchanging residences, especially between nurses and children. If we were in possession of any other information in reference to these pests, whether favourable or opposed to our theory, we would not withhold it. We now submit, whether with our present knowledge on this subject, any argument in favour of the plurality of species can be deduced from it. Do not these facts, on the other hand, afford another very strong evidence in favour of the unity of the species, since we know of no two species of animals that are in common infested by so many species of insects?" He concludes, therefore, that the insects which are found on the surface, and the vermes within the body, as far as they have been examined, are the same in all the varieties of men; and that where peculiar parasites infest men in particular countries, they are equally found in all the races.

We will add here also, in conclusion, one other consideration in the words of Dr Bachman. "The important fact must not be overlooked that our opponents are the assailants in this controversy. When Voltaire first promulgated his crude and most unscientific notions on this subject, and attempted to show that not only the African, but the Albino also, were distinct species of men, his object confessedly was not so much

to establish a truth in science as to invalidate the testimony and throw contempt on the Christian Scriptures. It is but recently that the advocates of the theory of a plurality have denied the long-received doctrine of the unity of the human race, as inconsistent with those principles which are received as the established laws of science. The *onus probandi*, therefore, rests with them. They have not been able to prove the truth of their position. We have no hesitation in saying that they are incapable of proving it. Until they shall have succeeded in this, the faith of men will remain unchanged."

Let it be therefore duly considered, that from this investigation we are enabled to prove the unity of the human races by a twofold argument. If—*as we have previously established*—all men have proceeded from the same original stock, then all men are and must be, according to the established usage of the word in natural science, of one species; and if, on the other hand, as has now been proved by a purely scientific argument, all men are of one and the same species, then it follows, on the principles of science, that all men have proceeded from the same origin or stock, as the Scriptures teach.

CHAPTER XI.

LATEST VIEWS OF PROFESSOR AGASSIZ, AND HIS THEORY TESTED.

Dogmatism in matters of science is just as reprehensible as in questions of religion.

Pride of opinion and arrogance of spirit are entirely opposed to the humility of true science.

Where we find all the same properties, we have reason to conclude there is the same real internal constitution from which those properties flow. —LOCKE.

While the Christian looks to this faith chiefly as a future good, even the sceptic should befriend it as a present good, and the sound philosopher as both.—LACON.

As Professor Agassiz has undoubted and most deserved pre-eminence as a naturalist in all the lower departments of animals, his opinion upon all questions touching the order of nature in these departments, and the consequent analogy from which to argue in the case of man, are of great importance. And as he has been led to commit himself as the champion of the theory of an indefinite number of original and separately created races of men, and to claim for his support the authority of Scripture, we devote a separate chapter to the consideration of his views, and their claim to any alteration in our own position.

I. We will in the first place show the apparently irreconcilable and contradictory statements of Professor Agassiz.

1. In 1845, in an article published in the Swiss Review on the Geography of Animals, he uses the following language :— "There exists, then, a real difference between the inhabitants of the different continents, and the remarkable coincidence which we have just pointed out between their primitive allocation; and the limitation of the fauna in these same continents, shows us clearly enough that their diversity ascends to the same primordial cause. But has this diversity the same origin? Has it the same signification with man as with (the inferior) animals? Evidently not. And here is again revealed the superiority of the human race and its greater independence in nature. Whilst (the lower) animals are of distinct species in the different zoological provinces to which they belong, man, notwithstanding the diversity of his races, constitutes one only, and the same species, over all the surface of the globe. In this respect, as well as in so many others, man seems to us to form an exception to the general rule in this creation, of which he is at the same time the object and the end."*

Here it is affirmed,—1st, that all animals have their limited natural provinces; 2d, that within these provinces they are of distinct species; 3d, that man, on the contrary, is of one only species, and yet of different races, and that he alone is cosmopolite; and 4th, that all these arrangements are the result of a primordial cause.

2. In the year 1846, while in Charleston, M. Agassiz declared before the Literary Club that he believed in an *indefinite* number of original and distinctly created races of men; and this opinion he based upon the fact, that all other animals were created in classes or groups within certain provinces, and adapted to them, and that in accordance with this analogy he was constrained to believe man to have been created in many different climates. He stated it also as a fact, that man could not exist except within these natural

* An account of the geographical distribution of animals, by L. Agassiz; extracted from the Swiss Review, Neufchatel.

climates, as for instance in the tried case of the Esquimaux.

On this basis, it will be seen, man is made to be of different original races, on the ground of an analogy to the other animals, while in the former statement he is made "of one only and the same" species, and therefore pre-eminent and distinguished from the other animals,—"an exception to the general rule in this creation, of which he is at the same time the object and the end."

3. In his work on the Principles of Zoology, published in 1840, M. Agassiz defines *species* to be "the lowest term to which naturalists descend, if we except certain peculiarities generally induced by some modification of native habits, such as are seen in domestic animals." "The species," he adds, "is founded upon less important distinctions, such as colour, size, proportions, structure," &c.*

To this *scientific* definition of the term *species*, which is in perfect accordance with the usage of naturalists,† he carefully and constantly adheres throughout the whole volume, as may be seen by the pages referred to below.‡

Let us then turn to page 180, and we find it said of man, that "he is every where the one identical *species*, yet several races, marked by certain peculiarities of features;" and on the same page (§ 452) it is shown that such differences are necessarily to be expected from the varieties of food, customs, modes of life, and climates, since those lead to "differences in the physical constitution of man which would contribute to augment any primeval differences."

In this work, therefore, we must regard M. Agassiz as coinciding with his views in 1845, and with those which we have advanced in this work, since if the races of men are only "*varieties*" of "*the same species*," and man is a "cosmopolite," and undoubtedly able to adapt himself after a few generations to every change of climate and condition, there

* Introduction. † See ch. x.-xii. of this work.

‡ See pp. 103, 105, 118, 127, 128, 154, 172, 180, 195, and 201.

is not the slightest difficulty in understanding how from one original central pair, and from one blood, all the nations of the earth have sprung.

4. Not such, however, are the present views of Professor Agassiz. In his lecture before the Association in Charleston, in March 1850, on the Classification of Animals, and on other occasions, we understood him to take the ground that this classification, as introduced by Cuvier, &c., would ere long cease to be founded upon specific distinctions, and would be based upon the natural distinctions disclosed by the comparative development of animals.

In his remarks in the Association, made after the presentation of Dr Nott's paper against the unity of the races, M. Agassiz took the opportunity to publish his opinion on this agitated question. And alluding, perhaps, to this work, which we had submitted to him as far as it had been published, he further said, that inasmuch as his opinions on this question had been made a matter of frequent inquiry, he would take this opportunity, once for all, to express his views very distinctly on the subject. He said many mistakes and some ill feeling had arisen among naturalists from not understanding the grounds of the controversy which were assumed by opposing parties. As a general proposition, he would side with those who maintain the doctrine of the unity of the race, if by the unity of the race be meant nothing more than that all mankind were endowed with one common nature, intellectual and physical, derived from the Creator of all men, were under the same moral government of the universe, and sustained similar relations to the Deity. It was quite a different question whether the different races were derived from the same common human ancestors. For his own part, after giving to this question much consideration, he was ready to maintain that *the different races of men were descended from different stocks*, and he regarded this position as fully sustained by divine revelation. The Jewish history was the history, not of divers races, but of a single race of mankind; but the

existence of other races was often incidentally alluded to, and distinctly implied, if not absolutely asserted, in the sacred volume. Of this last assertion he gave in proof the puerile and trite allegation of Dr Nott and other sceptics from Voltaire to the present day, that there were other races of men, co-existent with Adam and his son Cain, dwelling in the Land of Nod, and among whom Cain married and built a city. It is well said by the reporter of the *Courier*, that "the utterance of these opinions by this very eminent naturalist and philosopher created no little sensation among the members of the Association for the Advancement of Science."*

These views M. Agassiz has published in a paper on "The Geographical Distribution of Animals," in the March number of the *Christian Examiner*.† The object of this paper is to show that there is no common centre or several centres

* The reporter adds :—" The Rev. Dr Bachman said he was not disposed to discuss the question before the Society. He had just done it through the press ; and it was one of those nice and delicate questions which was, in his opinion, less suitable for open debate by a literary society, before a promiscuous audience, than for deliberate investigation, by the advocates of opposing theories, through the press. He had hoped that all discussion of the question would be waived in the public meeting of the Society ; but inasmuch as the learned Professor Agassiz had expressed an opinion on this very delicate question which would be likely to make a deep impression on many who held his opinions on all recondite matters in profound respect, he should take occasion, without entering into any argument, to sustain his own particular views, which he had done elsewhere, to state simply that he differed *in toto* from the position assumed by that learned gentleman in reference to this subject, and would refer those interested in following up the inquiry to the more full explanations of his views recently given to the public.

" The Rev. Dr Smyth, in a speech of much eloquence, expressed his entire concurrence in the views advanced by the reverend and learned gentleman who had just taken his seat. He also had devoted to this subject much inquiry. He was an advocate of the strict unity of the race, believing with the apostle that God had made of *one blood* all the nations of men that dwell on the face of the earth, *i. e.*, he believed, he said, that men had descended from the same common ancestors. He thought any other view of the subject would tend to overthrow the authority and defeat the objects of divine revelation."

† This is the organ of the Unitarian community in Boston. See for 1850, p. 118, &c.

of origin among all other animals besides man, but that they were all created in the localities they naturally occupy, and in which they breed, either in pairs or in multitudes, and, therefore, that there was no common central origin for man, but an indefinite number of separate creations, from which the races of men have sprung.

In confirmation of this theory, the learned Professor appeals first to Scripture,* and reiterates all we have quoted respecting the Bible. He affirms that it has reference to only one race, that of Adam, while it intimates that Adam and Eve were neither the only nor the first human beings created, as is proved by the circumstances recorded of Cain.† He also offers various considerations which have appeared to him to sustain his theory.

In fulfilment of the old Latin proverb, *Homines amplius oculis quam auribus credunt*, and as an ocular and irresistible proof of his theory, M. Agassiz has been very ready, and with great reiteration, to point out in the fingers of the negro a greater degree of web, and thus to demonstrate, by this partial development, the difference of specific character and origin in this race of men.

Such, then, are the outlines of Professor Agassiz's views on the unity of the human races, and his present—shall we say unfortunate ?—position.

The object he now aims at is twofold. First, by establish-

* Christian Examiner, p. 181.

† See pp. 184, 185. "Professor Agassiz," says a Boston reviewer, "takes the ground that the animals which now inhabit, or have at any time inhabited the earth, did not, as is generally supposed, proceed from one common centre and from one primitive pair; but, on the contrary, were created originally in those regions or zoological districts where they are now found, and over the whole extent of the same. These grand zoological districts he makes to be ten or twelve in number, distinctly marked off from each other by specific differences in the several classes or groups of animals which they sustain, and showing also a corresponding difference in their respective fossil remains, indicating that the same general laws which now govern the distribution of animals operated also in former and remote periods over the same regions."

ing an analogy in all other departments of nature, to raise an insuperable objection to the doctrine of a common origin of all mankind; and, secondly, by the introduction of a new principle of classification, to show that the races of men *must* be originally of different origin.

II. We shall first notice his *analogy*. And on this subject we remark that the force of an analogy seems to be altogether misapprehended. An analogy, that is, a similarity in the relations of certain objects, cannot *prove* any thing concerning the real nature, origin, or cause, of those objects, since it does not follow that because there is a resemblance, however striking, in some points, there must be a corresponding similarity in every other particular. All it can do is to obviate objections against the evidence produced for any doctrine. The plan followed by God in the creation and distribution of the lower animals, in former and present ages, cannot, therefore, prove that God followed the same plan in the creation and dispersion of mankind, *if there are any reasons from the Word of God, or other sources, for believing that "man is an exception to all other animals."* All that analogy could do would be to remove objections against the reasonableness of the doctrine of an original diversity of origin in the human family, *in the absence of any positive proof for a different conclusion.* In the present case, however, as we do claim to have positive proof, both from Scripture and from other sources, that "man is an exception to all other animals" in point of eminence, and that he at least in all his races did originate from a single pair, an analogy from the other animals could have no place and no force, especially when the relevancy of Scripture testimony is admitted and acted upon by Professor Agassiz himself.

But even were an analogy sufficient to *prove* similarity of origin and of distribution in the case of man and of other animals, we remark that the particular analogy here aimed at has not been completely made out. It is not true, as M. Agassiz has himself shown, that in every successive epoch of

nature an *invariable* order of origin and of distribution has been pursued in the animal kingdom, or that the same limitations have been always assigned to the provinces of animals. On the contrary, as in every epoch there has been an introduction of new and higher types of animals, so has "the distribution of animals been modified in accordance with the successive changes which the animal kingdom has thus undergone from the earliest period of its creation to the present day." We are led, therefore, to infer that, "as man came last, at the head of the creation in time as well as in eminence by structure, intelligence, and moral endowments," * and as "man is an exception to the general rule in this creation, of which he is at the same time the object and the end," the plan pursued in man's origin and distribution would be eminently peculiar; and that, as M. Agassiz has forcibly expressed it, "whilst the (lower) animals are of distinct species in the different zoological provinces to which they belong, man, notwithstanding the diversity of his races, constitutes one only, and the same species, over all the surface of the globe." †

The analogy aimed at by M. Agassiz has not, therefore, been made out. It was necessary, in order to have any weight as an analogy, to show that ALL other organized beings in EVERY epoch have been created "not in pairs, or progenitors, or centres of origin, but in large numbers," "over the whole extent of their natural distribution;" ‡—that they are confined to their zoological provinces;—and especially, that this has been the *invariable* order of nature as it regards the *higher* animals. But this is not proved. The contrary, to an extent sufficient to invalidate the analogy and the peculiarity of man, are fully admitted;§ and there is therefore no force in the attempted analogy, even did we not possess positive proof that it does not hold good in the case of man.

* See the article in Chr. Examiner, pp. 182, 186, 193, 194, 196.

† Agassiz, as before quoted. ‡ Chr. Examiner, pp. 192, 193.

§ Ibid. p. 186, where common centres are admitted to have been the earliest plan.

But again we remark on the analogical argument of M. Agassiz, that it is employed in erecting a man of straw, and then in pulling him to pieces. The whole object he aims at is to show the falsity of "the *prevailing* opinion which ascribes to *all* living beings upon earth one common centre of origin; from which, it is supposed, they in the course of time spread over wider and wider areas, till they finally came into their present states of distribution." *

Now, among what naturalists and men of science this theory prevails we are at a loss to conceive. The theory he denounces is not regarded even by divines of "the straitest sect" as necessary to the literal verity of Scripture.† It has been shown in this work, before we were aware of M. Agassiz's views, that such a theory is not required by Scripture, and it has nowhere been advanced by Dr Prichard or Dr Bachman.‡ Indeed, this theory of a central origin of all living beings is not at all necessary to the argument for the central origin of the human race. If true, it would only constitute an analogy, and not a proof; and in view of man's pre-eminence and peculiarity, it would have but little weight even as an analogy. In this whole discussion, therefore, M. Agassiz has been, so far as the establishment of this question of the unity of mankind is concerned, "fighting uncertainly as one who beateth the air."

But further on this point. It is admitted by M. Agassiz, that the fauna and flora, and especially the higher classes of animals, are identical in species "over the icy fields extending around the northern pole upon the three continents which meet in the North,"§ that is, *where they might easily spread*

* Chr. Examiner, pp. 181, 183, &c.

† See Geology and Revelation by Dr Pye Smith, pp. 94–96, Eng. ed.; Stillingfleet's Origines Sacræ, b. iii. ch. 4; Poole's Synopsis Criticorum on Genesis vii. 19; and Poole's Annotations on the Bible, vol. i. on Gen. vii. 19, &c.

‡ Dr Prichard has a full exhibition of his views on the point in Researches, vol. i., as quoted on this subject. All animals and plants might have been created anew after the deluge.

§ Chr. Examiner, p. 202.

from one common centre both by sea and land;—that "in the temperate zone," *where there is increasing difficulty in the way of such diffusion*, "we begin to find more and more marked differences between the inhabitants of different continents, and even between those of the opposite shores of the same ocean;"*—and that in the tropical climates, *where such intercommunication becomes most difficult*, there is naturally an entire difference of species.† Every thing, therefore, *in the actual arrangement of species* over the globe, conspires to show that similarity of species argues similarity of origin, according to the established opinions and observations of naturalists, and we can only wonder at the conclusion drawn against this position from difficulties which can easily be explained by the many fortuitous methods of distributing the seed of plants and the ova of animals.‡

But still farther. It was necessary for M. Agassiz to prove that *all* other animals were created with such special adaptation to their limited zoological provinces, that they are incapable of migration and of life in other climates and conditions, in order even analogically to draw a conclusion to the same effect respecting man. He does, indeed, affirm, and in language sufficiently plain, that "there is not one species of animals that is uniformly spread all over the globe;" "the universal law is that all animals are circumscribed within definite limits."

He argues that such migration in animals is in its very nature impossible, because it would ascribe to animals themselves, and to the physical agents under which they lived, forethought and intelligence.§ But surely the instincts and sagacity of animals indicate *some degree* of that intelligence and power in man which he himself allows, to be able to overrule the natural limitations of nature, and to secure changes

* Chr. Examiner, pp. 183, 184; and Zoology, pp. 154–175.

† See on this subject Dr Bachman, p. 150, &c.; and Dr Prichard, and Lond. Quar. Review, January 1850, p. 17.

‡ See Chr. Examiner, p. 192, &c.; and Dr Bachman, pp. 251, 268.

§ See Chr. Examiner, pp. 187, 193, 194, &c.

both as to character and location.* Animals—and especially the higher animals—we affirm, do not act *merely* "under the pressure of physical causes," but of life, instinct, and a certain degree of intelligence.

But M. Agassiz not only argues against the *possibility* of the migration of animals, but, as we have seen, against the fact. This assertion, however, must be *greatly* qualified. Of wild animals, what are the definite limits within which are circumscribed the wolf, the bear, the ermine, the otter found in Canada and Florida, the common deer breeding in Maine, Carolina, Florida, and Mexico, the buffalo ranging from the tropics to Great Marten Lake in lat. 63° or 64°, once ranging through the whole United States, and only restricted from the Eastern Continent by a boundless ocean, the wild turkey, and others? All other animals also, so far as they are of value to man, are adapted to become naturalized to every climate, and are, therefore, as truly cosmopolite as man, who equally requires naturalization. The horse, ass, cow, sheep, goat, hog, fowl, and turkey, breed in the northern cold, and within the tropics. Nearly all these have become wild in these various regions. Such is the case on all the Western prairies as well as in South America. But their constitution having become adapted both to tropical and temperate regions, did not require them afterwards to remove, and they, even in their wild state, inhabit all these regions. It will also be recollected that domesticated animals have now as wide a dispersion as man himself.

It is therefore just as true of other animals as of man, that under his care they are adapted to become cosmopolite. It is just as true of other animals as of man, that *in fact* they are cosmopolite, and that from certain primitive centres they have been diffused over all parts of the earth to which civilized man has carried them. This is also the case with regard to the Negro, the Mongol, and the other races of men. The analogy of nature, therefore, as it regards all the higher animals

* See Chr. Examiner, p. 193.

—and it is surely here alone we can look for any close resemblance to man—is decidedly and beyond all controversy in favour of the doctrine of one original stock as the source of all the human races.*

Finally on this analogy. Is not M. Agassiz very inconsistent in making an analogous condition of the *lower*, and especially of the *lowest* orders (of whom alone he claims any special competency to speak with authority), a ground from which to draw a conclusion respecting man? In regard to these animals, he argues against the existence of "any cause by which to account for their dispersion beyond the mere (physical) necessity of removing from their crowded ground, to assume wider limits as their increased number made it necessary." He regards them as governed exclusively by "the physical agents under which they live," and as having no will and no forethought. Man, on the contrary, he represents as possessing all these, and, therefore, as "acting not merely from natural impulses, or under the pressure of physical causes, but as being moved by a higher will." † He admits also in regard to man the necessary power of climate, food, and condition, to effect great changes in form and character.‡ He attributes to man a power adequate not only to secure these modifications in himself, but also in the lower animals, in contrariety to the natural and universal law of their being.§ We also understood M. Agassiz as affirming in the Association that the laws and characteristics, both as to origin and diffusion of every class of animals, must be determined by an examination of the facts respecting each class, and not by any general analogy or rules for determining species. Even, therefore, were all that M. Agassiz assumes as true of the lower animals really the case, it would afford no presumption in

* On this subject see Maculloch's Proofs of the Attributes of God; Lyell's Second Visit, vol. i., pp. 228, 229; London Quarterly Review, January 1850, p. 17, col. 1; Humboldt's Cosmos, p. 363, as quoted before on the fauna of the British Islands.

† See in Chr. Examiner, pp. 182, 183, 187, 193, 194, and 202.

‡ Zoology, pp. 180, 181. § See in Chr. Examiner, p. 193.

regard to man, who is an exception to them all, the lord of all, and pre-eminently distinguished by faculties superior to all.*

If man is cosmopolite—if species is constant, and depends upon the immaterial principle,†—if among the lower animals where there is no will, there are so great and admitted changes,‡—if even in the case of man such changes are allowed to be the inevitable result of alterations in condition, food, climate, &c.§—how can M. Agassiz consistently argue against the single origin and species of man because of differences among the human races, which are so trifling in comparison with those in other animals?‖

No proper analogy can be found among the lower animals to the human race, since, for an argument against the unity of the human species, drawn from the analogy of the lower animals, to be valid, it must, says Dr Latham, be taken from a species coextensive in its geographical distribution with man.

To be thus coextensive, it must not only be spread over a large area, but it must be spread continuously.

To be thus coextensive, it must be found at equally high and low sea-levels, as well as at equally distant degrees of latitude and longitude.¶

Besides, even if we allow him his plural centres of creation for the human race, what will it profit his theory? For, multiply these centres as he will, there are still varieties—individual, family, and national—among the same races, which are to the very full as difficult of explanation as those found among the races themselves.**

III. So much for the analogy of Professor Agassiz. We will now examine his proposed principle of classification. This principle is the result of the modern science of embryology, and is deduced from the regular and invariable order pursued in the gradual development of all animals, from their

* Zoology, pp. 181 and 206. † Ibid., pp. xiv. 9, 42, 180.
‡ Chr. Exam., p. 194. § Zoology, p. 181.
‖ See Chr. Exam., pp. 182, 193, 194. ¶ Ibid., p. 567.
** See Dr Bachman, 242, and Lond. Quart. Rev., p. 18, col. 2.

condition in the germ to the full maturity of their perfect form. As all animals resemble one another in the earliest transformations, their position in the scale of being is determined by the point at which this development stops, or the extent to which it is carried beyond other species.* There is thus provided in nature itself, an infallible and unchangeable rule for the determination of species, which is destined to work out great and happy results. M. Agassiz has therefore laid down certain rules, by which to determine "the arrangement of species according to their most natural relations and their rank in the scale of being," or, in other words, "what is that which gives an animal precedence in rank." †

1. The changes which they undergo during the whole course of their development must be considered.‡

2. The relative grade of animals is to be appreciated by the comparative study of their development before and after their embryonic period. §

3. Animals are distinguished also by the nature of their organization when completed; in some this being very simple, in others extremely complicated. ||

4. An animal is more perfect in proportion as its relations with the external world are more varied, in consequence of its more perfect senses and capacity for motion.¶

5. Every separate organ is found also to have every degree of complication and nicety in the performance of its function, according to the rank of the animal; as, for instance, the nature, size, and position of the brain.**

6. Affinities, or the similarity of purposes and functions, and not analogies, or the relation of organs constructed on the same plan, are to guide us in the arrangement of animals.††

7. Another principle which must guide in the arrangement of animals, is their relation to the regions they inhabit.‡‡

* See Zoology, ch. x., &c., and p. 7. sect. 18–23.
† Ibid., ch. i. p. 5, &c.
‡ Ibid., p. 7, sect. 18, 19.
§ Ibid., p. 7, sect. 20–22.
|| Ibid., sect. 12.
¶ Ibid., p. 5, sect. 13.
** Ibid., pp. 5, 6, sect. 14–16.
†† Ibid., p. 6, sect. 16, 17.
‡‡ Ibid., p. 8, sect. 23.

8. Besides the distinctions to be derived from the varied structure of organs, there are others not less decisive to be drawn from the immaterial principle, since "it is this which determines the constancy of species from generation to generation," and is "the source of all the varied exhibitions of instinct and intelligence."*

9. We must not lose sight of the animal in its relations to creation as a whole, in our consideration of its own organism.

10. The highest end of natural history is gained when we are in this way led to "perceive in creation the execution of a plan fully matured in the beginning, and invariably pursued as the work of a God infinitely wise." †

Such, then, is the principle of classification as developed by M. Agassiz, and upon which he and his followers predicate the infallible disproof of the unity of the human races. Of course, as it regards the unity of the human races, the only application this principle can have must be to the diversity of the specific characters of men, and not to the plurality of their origin, since upon this latter it can have no bearing. The argument, when analyzed, must be this:—The races of men are proved by these rules to be of different species; and as this difference has been constant and invariable, these specific distinctions must have been primitive, and their origin distinct and different.

Our reply to this argument is twofold: First, this principle and these rules of classification do not prove men to be of different species. Secondly, this theory does, on the contrary, prove that all the races of men are "of one only and the same species." The question of origin is thus left to be determined by the rules and evidence appropriate to it.

That these rules of classification do not prove men to be of different species is certain; because in the order of their development,—in its extent,—in its period before and after birth,—in all the structural organization to which it leads,—in the number and relations of all the organs,—in all the laws

* See Zoology, ch. i. p. 9, sect. 26. † Ibid., p. 10, sect. 29.

of animal life,—in their adaptation to change of climate, food, and condition,—in their immaterial, intellectual, and moral powers,—in these and every thing which characterizes man to be, as M. Agassiz allows, pre-eminently superior to all other animals, all men are, and have been proved to be, essentially and indisputably alike. We had intended to take up these rules seriatim, and to apply them to all the principles of embryonic development laid down by M. Agassiz. But it is really unnecessary, since no attempt has been made to prove a difference among the races of men, as measured by these rules, beyond the fact of a comparatively less development of the fingers, and therefore a greater length of web, in the negro hand; and a similar difference, as alleged by Dr Neill (though not avowedly for this end), in the edges of the maxillary bones.*

That M. Agassiz should seriously urge this peculiarity in the negro as a proof that they are of a race primitively distinct in origin and in specific rank and character as human beings, has been to very many a source of great amazement.

In the first place, does not M. Agassiz himself, as we have seen, admit the power of climate, food, condition, and the state and activity of the intelligence and the will, to modify the actual development of men, both as to extent and appearance? Is it not the doctrine of the ablest physiologists that civilization, with all its concomitant influences, does affect the form and development of the brain, the skull, the features, the passions, and the faculties of men?†

And would it not, therefore, be an anomaly, a contradiction to all experience, if in the negro race we did not find, in connection with ages of degradation, an imperfect development, to some extent, in the physical and mental powers? That there are such differences in their actual character and condition all must admit; and that this is what must have

* American Journal of Medical Science, Jan. 1850.

† See the opinion of Dr Prichard, Carpenter, Lawrence, Dowling, &c. quoted.

been expected, under the circumstances of the case, all must be equally ready to allow.

But do these variations, in fact, amount to any thing like specific distinctions? If they do, then similar variations in other animals of the higher order must be sufficient for classifying them under different species. But is this done, or can it be done? Among dogs, who are regarded even by Dr Morton as of the same species, the Newfoundland race is semi-web-footed to an extent much greater than the negro. There is also a race of dogs in America with very short tails, and a race of cats without tails at all. There is also a race of fowls in that country which are rumpless and destitute of the vertebræ. There is a whole race of hogs with solid hoofs. And in all the domesticated animals, we see in various ways the power of altered condition, food, climate, and habits, in modifying form, character, and general structure. We thus perceive that changes, the very same in *kind*, and much greater in *degree*, do result from natural causes working upon the constitutional adaptation of the animal organization in all the higher animals, and we are, therefore, led to conclude that, in view of man's admitted cosmopolite character, his power of self-modification,* and the immeasurably greater changes to which, in all his diversified conditions, he is liable, much greater modifications of form and development might be expected in branches of the same race.

The principles of classification adopted by M. Agassiz do not, therefore, in any degree militate against the specific character, and, therefore, the original unity of the human races. On the contrary, they afford another and very powerful criterion by which that unity may be established, since all races of men are found to be conformed in every essential particular to the order of nature in their structural, physiological, and functional development. They are essentially the same as he admits in that immaterial principle on

* See Agassiz in Chr. Examiner, p. 193.

which the constancy of species depends;*—in the power of will by which they can effect changes;—in their location, food, employments, and character;—in their embryonic condition and transformations;—in the number, variety, and composition of their tissues;—in the number, character, and purpose of those large and distinctly limited cavities destined for the lodgment of certain organs, such as the brains, lungs, &c.;—in the well-defined and compact form of the organs lodged in these cavities;—in the process by which the food is elaborated and digested;—in the functions of relation and sensation, and, therefore, in their nervous system, its form, arrangement, and volume;—in the peculiar organs which give the sensation of sight, hearing, smell, taste, and touch;—in the structure and position of the eye, ear, and nose;—in that perception, memory, and reasoning which constitute intelligence;—in the entire skeleton, which is an essential test of species;—in the functions of digestion, circulation, secretion, and respiration;—in their teeth, their hearts, their skin, their glands;—in all the peculiarities of the two sexes;—in ovulation;—in the gradation of more and more complicated adaptation by which they are distinguished;—in the same general appearance;—and in all those transformations which precede or which succeed birth.† Physically, intellectually, and morally considered, all men, therefore, "every where, are the one identical species, yet several races."‡ And hence the result of the application of M. Agassiz's principle is to show, that in all respects wherein all men differ from the lower animals, they are precisely alike to one another, and wherein they differ from each other as races, they differ also as nations, families, and individuals. These differences are, therefore, varieties, and not specific distinctions.§ "Species," says M. Agassiz, "is the lowest term

* Zoology, by Agassiz, pp. xiv. and 180.

† See in Chr. Examiner, p. 193.—Zoology, pp. 15-18, 20, 22, 24, 44, 45, 51, 73, 82, 83, 89, 99, 102, 103, 105, 106, 110, 121, 125, 127, 128, 151, 152.

‡ See London Quarterly Review, pp. 10, 12, 13.

§ Zoology, p. 180, and London Quarterly Review, Jan. 1850, p. 16, col. 2.

to which (in classification) we descend, if we except certain peculiarities."* And as all men are of one species, the differences among them must be variations and not specific distinctions. And hence, also, as the variations of the same acknowledged race (as the American and the European, the Mongolian and the African) are as great as the differences of these races from one another, and as they all pass into one another by gradual and insensible transitions, these variations could not have been the result of any original and distinct creation of separate races. †

We might now proceed to notice the views of Professor Agassiz on the Scriptural relations of this question. But, as these have been already considered, we will only observe, that he confounds altogether the Mosaic testimony respecting the central origin and dispersion of the human race, with its allusions to the lower animals, about which, as we have seen, Scripture makes no definite statement which is not capable of interpretation in accordance with the facts of science. His disproof, therefore, of one common centre of origin for all the fauna and flora of the globe, in no way militates against the clear and frequent testimony of Scripture respecting the common relation of all mankind to Adam and Christ. It is upon this common relation of all men to the first man Adam, and to the second Adam who is Christ, the whole scheme of divine mercy is founded, and an interest in its unspeakable blessings offered to "EVERY CREATURE IN ALL THE WORLD." And hence, in rejecting these facts, M. Agassiz will be regarded by the great body of the Christian world as overturning the very foundations of Christianity itself.

* Zoology, p. 14, &c., &c.

† M. Agassiz does not seem to have finally settled his own opinion. See Zoology, p. 204, close.

NOTE.

HUGH MILLER, ESQ., ON THE ANALOGICAL ARGUMENT.

In his notice of this work in the *Witness*, Mr Miller remarks,—"The analogies *may* be on the side of the naturalist,—as M. Agassiz says they are,—and he may be quite right in holding, that varieties of the race so extreme as that of the negro on the one side, and the blue-eyed, fair-haired, diaphanous Goth on the other, could not have originated *naturally* in a species possessed of a common origin, during the brief period limited by authentic history on the one hand, and the first beginnings of a family so recent as that of *man* on the other. But, though he may possibly be right as a naturalist,—though we think that matter admits of being tried, for it is far from settled,—he may be none the less wrong on that account as a theologian. His inferences may be right and legitimate in themselves, and yet the main deduction founded upon them be false in fact. Let us illustrate. There is nothing more certain than that the human species is of comparatively recent origin. All geological science testifies that man is but of yesterday; and the profound yet exquisitely simple argument of Sir Isaac Newton, as reported by Mr Conduit, bears with singular effect on the same truth. Almost all the great discoveries and inventions, argued the philosopher, are of comparatively recent origin: perhaps the only great invention or discovery that occurs in the fabulous ages of history is the invention of letters; all the others,—such as the mariner's compass, printing, gunpowder, the telescope, the discovery of the New World and Southern Africa, and of the true position and relations of the earth in the solar system,—lie within the province of the authentic annalist; which, man being the inquisitive, constructive creature that he is, would not be the case were the species of any very high antiquity. We have seen, since the death of Sir Isaac, steam, gas, and electricity, introduced as new forces into the world; the race, in consequence, has, in less than a century and a half, grown greatly in knowledge and in power; and, by the rapid rate of the increase, we argue with the philosopher, that it can by no means be very ancient;—had it been on the earth twenty, fifty, or a hundred thousand years ago, steam, gas, and electricity would have been discovered hundreds of ages since, and it would at this date have no such room to grow. And the only very ancient history which has a claim to be authentic,—that of Moses,—confirms, we find, the shrewd inference of Sir Isaac. Now, with this fact of the recent origin of the race on the one hand, and the other fact, that the many various languages of the race so differ that there are some of them which have scarce a dozen of words in common, a linguist, who confined himself to the

consideration of natural causes, would be quite justified in arguing that these languages could not possibly have changed to be what they are, from any such tongue, in the some five or six thousand years to which he finds himself restricted by history, geology, and the inferences of Sir Isaac. It takes many centuries thoroughly to change a language, even in the present state of things, in which divers languages exist, and in which commerce, and conquest, and the demands of literature, are ever incorporating the vocables of one people with those of another. After the lapse of nearly three thousand years, the language of modern Greece is essentially that in which Homer wrote; and by much the larger part of the words in which we ourselves express our ideas, are those which Alfred employed when he propounded his scheme of legislative assemblies and of trial by jury. And were there but one language on earth, changes in words or structure would of necessity operate incalculably more slowly. Nor would it be illogical for the linguist to argue, that if, some five or six thousand years ago, the race, then in their extreme infancy, had not a common language, they could not have originated as one family, but as several, and so his conclusion would in effect be that of the American naturalists. But who does not see that, though *right* as a linguist, he would be *wrong* as a theologian,—wrong in fact? Reasoning on but the common and the natural, he would have failed to take into account, in his calculation, one main element,—the element of miracle, as manifested in the confusion of tongues at Babel; and his ultimate finding would in consequence be wholly erroneous. Now, it is perhaps equally possible for the naturalist to hold that two such extreme varieties of the human family as the negro and the Goth could not have originated from common parents in the course of a few centuries,—and certainly the negro does appear in history not many centuries after the Flood. He had assumed his deep black hue six hundred years before the Christian era, when Jeremiah used his well-known illustration, "Can the Ethiopian," &c.; and the negro head and features appear among the sculptures and paintings of Egypt several centuries earlier. Nay, negro skulls of a very high antiquity have been found among the mummies of the same ancient kingdom. But though, with distinguished naturalists on the other side, we would not venture authoritatively to determine that a variety so extreme could have originated in the ordinary course of nature in so brief a period, just as we would hesitate to determine that a new language could originate naturally in other than a very extended term, we would found little indeed upon such a circumstance, in the face of a general tradition that the negroid form and physiognomy were marks set upon an offending family, and scarce were less the results of miracle than the confusion of tongues. We are far from sure, however, that it is necessary to have recourse to

miracle. The Goth is widely removed from the negro; but there are intermediate types of man that stand in such a midway relation to both, that each variety, taking these as the central type, is divested of half its extremeness. Did such of our Edinburgh readers as visited the Exhibition of this season mark with what scholar-like exactness and artistic beauty the late Sir William Allan restored, in his last great picture, ("The Cup found in Benjamin's Sack,") the original Egyptian form, as exhibited in the messengers of Joseph? Had the first men, Adam and Noah, been of that mingled negroid and Caucasian type—and who shall say that they were not?—neither the Goth nor the negro would be so extreme a variety of the species as to be beyond the power of natural causes to produce.

"We had purposed referring at some length to that portion of the argument which is made to rest on analogy. We have, however, more than exhausted our space; and merely remark, that it is not at all a settled point that the analogies are in favour of creation in a plurality of centres. Linnæus, and his followers in the past, and men such as Edward Forbes in the present, assert exactly the contrary; and, though the question is, doubtless, an obscure and difficult one,—so much so, that he who takes up either side, and incurs the *onus probandi* of what he asserts, will find he has but a doubtful case,—the doubt and obscurity lie quite as much on the one side as the other. Even, however, were the analogies with regard to vegetables and the lower animals in favour of creation in various centres, it would utterly fail to affect the argument. Though the dormouse and the Scotch fir had been created in fifty places at once, the fact would not yield us the slightest foundation for inferring that man had originated in more than a single centre. Ultimately, controversies of this character will not fail to be productive of good. They will leave the truth more firmly established, because more thoroughly tried, and the churches more learned. Nay, should such a controversy as the present at length convince the churches that those physical and natural sciences which, during the present century, have been changing the very face of the world and the entire region of human thought, must be sedulously studied by them, and that they can no more remain ignorant without sin than a shepherd can remain unarmed in a country infested by beasts of prey, without breach of trust, it will be productive of much greater good than harm."

ADDRESS BEFORE THE MEDICAL ASSOCIATION OF SOUTH CAROLINA. By Dr John Barratt, of Abbeville, S. C. Charleston, 1850.

"This Address," says the author, "is in performance of a task

not congenial to the habits of our profession." Thirty-three years ago he came to this country "fresh from the land of Wilberforce, with *prejudices* in favour of universal brotherhood," but "the evidences here presented to his senses were paramount;" "his faith in the doctrines of original unity melted in the light of revelation," and he was filled with the spirit, not of wisdom, but of poetic inspiration, and gave utterance to these sublimely prophetic words:

> "And I said, if these are brothers, how changed
> From white to black, from lank to curly hair,
> With flattened nose, retreating forehead,
> Short chin, and uncouth thickened lips,
> As if fancy and nature had combined
> To mar the godlike form and face of man." *

From such a revelation we might have expected either an authoritative declaration of the truth on this question, or an independent and convincing demonstration. But the spirit of revelation left him, and, amid darkness and perplexity, he is content as a blind man to follow the blind.

His house is very towering, but it is built upon the sand. An analogy is the sum and substance of his proof: "Every isolated portion of the earth's substance is found to have a flora and a fauna of its own;" so that probably some fifty such regions could be recognised with species entirely dissimilar, where they could not have originated from other sources, as in the tropics. His theory, therefore, and his argument, are the same as those of Professor Agassiz; and to our remarks upon them we refer our readers. We will only add here one practical test of the validity of the argument drawn from the apparent differences in men, which, to come within the scope of his analogy at all, must be regarded as specific.

It must strike every reader of this address that there are great apparent differences in its style. Here and there are found passages which would *apparently* indicate a different origin from the rest. But are they really so? When the respected author gives it to the world as his, we have in this a positive testimony, relying upon which we can at once believe in the unity, in the face of all apparent proofs of a diversity of origin. In the same manner when our author, thirty-three years ago, saw for the first time the great apparent differences among God's human creatures, he was led to the conclusion that these must have had a different origin. But in this case, as in his own, we have a declaration from the author of them all, and that too far more explicit than his own, that "God who made the world and all things therein, and giveth to all life and breath, and all things, hath made of one blood all nations of men for to dwell on all the face of the earth." Shall we then believe the author, or our own hasty impressions? For our part, we had far rather be found guilty of denying the identical origin and authorship of all the sentiments and paragraphs

* The Address is closed with a poem of at least equal beauty and sublimity.

of this address, than the identical origin in "one blood" of all the races of men.

To this alternative Dr Barratt, however, has not driven us. He claims to be a Christian, and he feels a deep reverence for the revealed Word of God, and as from this "arises his objection to an appeal to the Bible to support or condemn any hypothesis or theories (?) of nature," we cannot believe he will call God a liar, in order to maintain an inconsequential inference from an imperfect and altogether misplaced analogy. He will no longer, therefore, pervert and profane Scripture by speaking of the negro race as still "*maintaining his integrity*," that is, his colour, or of the Israelites as God's "peculiar people," on account of physical peculiarities. Far better for Dr Barratt to maintain his integrity as a Christian, and believe as he appears to do, (see p. 43,) that "man was not diversified in his original creation, the law of physical change, and moral fitness being passed on the Babel throng at the dispersion, to occupy the earth's dissimilar surface." On this basis we are happy to assure him "there is no tendency to scepticism, but, on the contrary, it is nature harmonizing with revelation."

CHAPTER XII.

THE UNITY OF THE RACES PROVED FROM THEIR FERTILITY, AND THE INFERTILITY OF HYBRIDS.

That only is reasonable which is true; that only can be legitimately affirmed to be true which can be clearly proved to be true. All beyond is conjecture, and conjecture is not science.—ETHNOLOGICAL JOURNAL.

The sole consideration inductive research regards is the accuracy and truth of its evidence.—POWELL'S NAT. AND DIVINE TRUTH.

Nature will perpetuate varieties, for this is in accordance with her operations; but refuses to multiply hybrids, for this is contrary to her laws. —DR BACHMAN.

WE are now led to remark, that among all other animals, without exception, *different species* remain separate and distinct—do not naturally and voluntarily associate, breed, or mate together, and are not capable of uniform, invariable, and permanent continuance by natural propagation. For the full and indubitable establishment of these positions we refer to the profound and elaborate work of our friend, the Rev. Dr Bachman, who is, we believe, admitted to be the most eminent of American naturalists, and not inferior in his departments to any of any country. In this work he has incontrovertibly established the positions above stated, and by an examination, *seriatim*, has shown the incorrectness of every instance adduced by Dr Morton to prove that a fertile progeny has been produced by the union of animals—both birds and quadrupeds—which were of different species.

Formerly the constancy and fertility of offspring were regarded by naturalists as infallible criteria of species. Constant reproduction, therefore, entered into the definition of species as given by Buffon, Cuvier, and others. Flourens, after citing Buffon and Cuvier's definitions of species as based on constant reproduction, concludes that "*unity, absolute unity*, of the human species, and *variety* of all its races as a final result, is the general and certain conclusion of all the facts acquired concerning the natural history of man."*

To prevent the inevitable certainty of this conclusion, and the consequent establishment of the truth of Scripture in one important doctrine which it every where affirms and implies, great efforts have been made to produce hybrid breeds, and from them to secure permanent and fertile varieties. The results seemed so far favourable to the opponents of the unity of the races, as to lead Drs Prichard, Lawrence, and others, to abandon constant reproduction as an *infallible* mark of species. To sustain this position, Dr Morton published an elaborate essay, in which he accumulated with great industry and learning all the instances of fertile hybrids which had occurred. This essay was entitled, "Hybridity in Animals considered in reference to the question of the Unity of the Human Race."

To this question Dr Bachman has devoted years of experiment, observation, and study, both in Europe and America, and to its thorough examination he has appropriated a large portion of his volume, which has lately issued from the press.

"The object," says Dr Bachman, "of Dr Morton's paper is to show from facts, 'that different species of animals are capable of producing together a prolific hybrid offspring, and therefore that hybridity ceases to be a test of specific affiliation.' 'Consequently, the mere fact that the several races of mankind produce with each other a more or less fertile pro-

* Annales des Sciences Nat. t. x., Dec. 1838, p. 361; do. in Rev. of Morton, pp. 5, 6.

geny, constitutes in itself no proof of the unity of the human species.'

"The infertility of hybrids has always been a stumbling-block in the way of their theory, who deny the unity of the human race. If the races of men produced fertile offspring with each other, and the races of inferior animals did not,—if the latter were found to be barren and unfruitful, and the former increased and multiplied, and replenished the earth, then they would be obliged to prove that man was an exception to this universal and invariable law that regulated the whole of the inferior creation. They possessed no evidence to prove this; for although man in his moral nature is endowed with high intellectual powers, yet in his physical nature he is an animal, coming into the world like other animals, and like them returning to the dust. In this dilemma they resorted to the desperate expedient of endeavouring to show, that in respect to the fertility of hybrid offspring man was not peculiar; that many races of animals could be found possessing the same physical powers of producing intermediate and fertile races. Hence they have ransacked the almost forgotten tales of ancient travellers, and dragged from obscurity the vulgar errors long hidden beneath the dust of antiquity, and indulged themselves in conjectures and doubts, in order to weaken the faith of men in the long-established views of naturalists in regard to the sterility of hybrids. Our object has been to show the frail tenure of the foundation on which they leaned for support, the many errors which they triumphantly paraded as facts, and the weakness of the arguments by which they sought to build up their theory.

"We will endeavour now to offer our reasons and produce our facts to prove that several of his facts are not supported by competent authority, that others are disproved by naturalists of high authority, and that when the statements contained in his papers have been so expurgated as to be freed from matters admitted on very doubtful authority, the result

will prove that his facts militate against his theory, and go to maintain the view we have adopted after some sacrifice of time, and no small degree of labour."

After devoting a full examination to every instance alleged by Dr Morton in favour of the fertile hybridity of animals, Dr Bachman concludes :—" We have now seen that, with all the ingenuity of the believers in the fertility of hybrids, they have not been able to produce a solitary case in which they have clearly and incontestably proved that a single race of animals or birds has been perpetuated from hybrids of two or more species. Their vague assertions have been hazarded without proof, and have been contradicted by the experience of many eminent naturalists, whose general knowledge and habits of close investigation have certainly given them equal claims on public confidence.

" In one case out of a hundred—such as the instances of the buffalo and common cow among quadrupeds, and that of the China and common goose among birds, which are the only two cases well attested—hybrids have been productive, but this did not continue beyond two or three generations, and could be prolonged only with the pure blood of either stock, and of course either died out, or returned to their original species. We have no doubt that among a few species, especially the ducks, some may produce hybrids constituted like those from the China goose, to produce progeny for even two or three generations before absolute sterility occurs. We observed a cross of this kind in the Zoological Gardens, between the common duck and some other European duck, we believe the shell-drake (*Atadorna*), which was said to have been fertile for at least one or two generations. Of the remaining number that are recorded by Dr Morton, the cases of hybridity may be set down as those of absolute sterility, since, had it been otherwise, the world would have been made acquainted with the important facts."

After enumerating a multitude of cases of sterility, Dr Bachman proceeds to remark:—" We could add half a page

to this list, and of these not a few were produced under our own eye; but this would be superfluous. In all these cases, nature proclaims her determination to preserve the races in spite of all intermeddling with her operations. This stamps upon these unnatural offspring the seal of sterility; and nearly all the cases that Dr Morton has cited, and fifty more that are on record, are so many proofs of the errors in the theory of Col. Smith, and all who have adopted his speculative notions. Each new case of a sterile hybrid is an additional evidence in favour of our theory, that the laws of nature are opposed to the production of new races by the commingling of two or more species.

"Nor should the fact be overlooked, that the occurrences in hybridity that are on record have taken place at very long intervals of time, and in most cases through the artificial agency of man. There is a repugnance among the wild species to such a union, and it only occurs when the individuals unnaturally paired are entirely excluded from those of their own species. Even should an attachment take place, the organic differences in the different species, in the majority of instances, prevent the production of any issue.

"In reading the articles of Dr Morton, we have frequently been reminded of another fact. Nearly all the examples which he had quoted, that have an important bearing on this subject, are brought to us from so great a distance, that we have not the means of investigating the accuracy of the statements; and courtesy would lead us not to deny that which we have not the means of disproving. But why carry us to Egypt, to the Steppes of Tartary, to the Island of Java, and the wilds of Paraguay and Yucatan, to ascertain the truth of the relations of Maga and De la Malle, the beytræge of Rudolphi, the rambles of Captain Stedman, or the interested collector who sent to Temminck his specimens of wild and tame cocks and curassoes? Have we not a right to suppose that the same prodigies that have occurred elsewhere will take place here? Striking and permanent varieties, it must

be admitted, have occurred in our country, as they have elsewhere. The wolf, the squirrel, the deer, the black rat, the Norway rat, and the white-footed mouse, among wild animals, have produced their permanent varieties; and among the domesticated ones, the cow, the hog, the sheep, the peafowl, and Guinea hen, and the common fowl, have, within our own memories, exhibited this phenomenon. But from whence have these varieties been derived? Not surely from any intermixture of any two species, for there were no species with which they could unite; they have sprung up with themselves, and were not indebted to any foreign alliance for the changes which nature produced."

The following are the conclusions to which Dr Bachman believes himself incontrovertibly led by the facts in regard to all animals:—

"1. Nature, in all her operations, by the peculiar organization of each species—by their instinctive repugnance to an association—by the infertility of a hybrid production, when by art or accident this takes place—and by the extinction of these hybrids in a very short period of time, gives us the most indubitable evidence that the creation of species is an act of Divine power alone, and cannot be effected by any other means.

"2. That no race of animals has ever sprung from a commingling of two or more species.

"3. Domestication, in every species that has been brought under subjection, produces striking and often permanent varieties, but has never evolved a faculty to produce fertile hybrids.

"4. Since no two species of animals have ever been known to produce a prolific hybrid race, therefore hybridity is a test of specific character.

"5. Consequently the fact that all the races of mankind produce with each other a fertile progeny, by which means new varieties have been produced in every country, constitutes one of the most powerful and undeniable arguments in favour of the unity of the races."

In accordance with these conclusions, Professor Owen says: —"The tendency of all the natural phenomena relating to hybridity is to prevent its taking place, and, when it has occurred, to arrest the propagation of varieties so produced, and to limit their generative powers so as to admit only of reversion to the original specific forms. The individuals of different species do not voluntarily copulate. In a few exceptional cases, serving only to establish the rule of their inferiority, specific hybrids have been known to propagate together and produce a degenerate intermediate race, which soon becomes extinct; it more commonly happens that a hybrid is sterile, or propagates only with an individual of pure breed."

"We would ask, then," says Dr B., "those who consider the races of men as composed of different species, why all the varieties of men are found to produce fertile new races, whilst we discover that when we associate two true species of other animals their products are hybrids, and incapable of perpetuating a race? Why is it that they have been so much staggered and perplexed by this most important fact? Why was it that, in order to escape from this annoying difficulty, they were for so many years engaged in vain and ineffectual endeavours to prove that the descendants of their two species of men, the white and the black, were hybrids? First, they endeavoured to show that they were sterile; then, that they were only prolific with one or the other of the original species; and finally, that the hybrid race soon died out. When at last the supporters of their own doctrines pointed out to them races that had existed and multiplied for hundreds of years, and were now as healthy and fertile as any of the other races of men, why have they so suddenly shifted their sails on the other side, and would carry their sinking bark to a port of safety under the false colours of fertile hybrids in the lower races?

"Let it then be understood, that we have no case on record where a single new race of animal or bird has sprung up from an association of two different species.

"All the varieties of the human species are known to propagate with each other—to produce fertile progeny, which has continued to propagate from the earliest periods on record, through every succeeding age, up to the present period. In this way new races have been formed and perpetuated. Since this is known to be the case, then, if these various races of men are composed of different species, they will prove an exception to the general law by which all other organized beings are governed; and it rests with our opponents to show wherein this organization consists, and why man should be an exception to these laws of the Creator which are stamped on all the inferior races.

"It is, then, as our opponents are aware, a long-established and undeniable fact, that all the races of men, in every age and in every country, produce offspring in their association with each other. That the Caucasian, Mongolian, African, Malay, and the aboriginal American, all are affording us the most convincing evidences of this fact. That in this manner many new intermediate races have been produced on the confines of Asia, Africa, and Europe; and that, within the last two hundred years, a new race has sprung up in Mexico and South America, between one branch of the Caucasian and the native Indian, together with no small admixture of African blood. They are aware that in the United States, whose first permanent settlement commenced in Virginia in 1607, the two extremes of African and Caucasian have met and produced an intermediate race. We know them to be fully as prolific, if not more so, as the whites, where their constitutions have not been wasted by dissipation. We will not stop to inquire whether this race is equally as long-lived as either of their originals; but even here we would find no difficulty, as no one will be disposed to deny the fact that some races of the pure Caucasian, the Mongolian, and African families are more robust and longer-lived than others. The facts, however, are undeniable, that all these half-breeds are prolific with each other; and we can point out at least the descen-

dants of five generations, both in Carolina and New York, where there has been no intermixture with either of the original varieties, and they are to this day as prolific as any of the other races of men. We are aware that laboured articles have been written to show that the descendants of the two races, especially those between the Caucasian and African, in the process of time become sterile. We have not, however, of late, heard this argument insisted on, and we believe it is virtually abandoned.

"The learned researches of Dr Morton (*Crania Americana*), which are characterized by great knowledge and sound discrimination, will, we think, set this matter for ever at rest. The accounts scattered throughout his essay, of the many intermediate tribes of nations that have derived their origin from an admixture of Mongolian, Malayan, American, Caucasian, and African blood, are calculated to convince all who have hitherto entertained any doubts on this subject, that not only these widely separated, but all the varieties in the human species, produce in perpetuity an intermediate and fertile progeny. Malte Brun, speaking of the Portuguese in Africa, says: 'The Rio South branch is inhabited by the Maloes, a negro race, so completely mingled with the descendants of the original Portuguese as not to be distinguished from them.' Several writers inform us that there is a large and growing tribe in South Africa called the Griqua, on Orange river, being a mixture of the original Dutch settlers and the Hottentots, composed of more than five thousand souls. These are referred to by Thompson and Lichtenstein, in their travels in South Africa. Several similar races, a mixture of the African and Spaniard or Portuguese, exist in South America, separated from other communities. The last calculation we have read of the population composed of the mixed races, in North and South America, amounted to upwards of five millions."

To conclude: since this law of uniform, permanent, and natural propagation has been made by God an invariable mark of specific difference among all other animals, it follows

that, as the present inhabitants of the earth are made up of races formed by the amalgamation of many varieties, the human family must be of one species.*

* Mr Martin has devoted a long and able chapter, in his Natural History of Man and Monkeys, to this question, and with similar results. See pp. 160–178.

CHAPTER XIII.

THE UNITY OF THE RACES PROVED FROM THE UNIVERSALITY, NATURE, AND CONNECTION OF LANGUAGES.

ΠΟΛΛΑΙ μεν θνητοις ΓΛΩΤΤΑΙ, μια δ' Ἀθανατοισι.

Τεως δε ὀντας ὁμογλωσσους ἐκ Θεων πολυθρον φωνην ἐναικασθαι νυν Βοβυλων καλειται, δια την συγχυσιν του περι δια την λεκτον πρωτην ἐναργους.—ABYDENUS IN EUSEB. CHRON. p. 13.

This problem of the antiquity of the human species is most likely to be worked through the phenomena of language. When determined, it will give precision to the recent period of the geologist, converting it from a relative into a conventionally absolute epoch.—DR LATHAM.

LANGUAGE is the miracle of human nature, at once its chief distinction and its highest glory. The lower animals can indeed communicate with one another by signs and sounds, but they cannot speak. They are destitute of vocal organs, and of the thoughts that breathe and the words that burn. Between those voices of which lower animals are capable and the language of man, there is very little analogy. Human language is capable of expressing ideas and notions which there is every reason to believe that the mind of the brutes cannot conceive. "Speech," says Aristotle, "is made to indicate what is expedient and what is inexpedient; and in consequence of this, what is just and unjust. It is therefore given to men, because it is peculiar to them, that of good and evil, of just and unjust, they only, with respect to other animals, possess a sense or feeling." The voices of brutes seem intended by nature to express, not distinct ideas or moral modes, but only such feelings as it is for the good of the species that they should have the power of making known; and in this as in

all other respects, these voices are analogous, not to speaking, but to weeping, laughing, singing, groaning, screaming, and other natural and audible expressions of passion or appetite.

Another difference between the language of men and the voices of brute animals consists in articulation, by which the former may be resolved into distinct elementary sounds or syllables; whereas the latter, being for the most part inarticulate, are not capable of such a resolution. Hence Homer and Hesiod characterize man by the epithet μερόψ, or voice-dividing, as denoting a power peculiar to the human species; for though there are a few birds which utter sounds that may be divided into syllables, yet each of these birds utters but one such sound, which seems to be employed rather as a note of natural music than for the purpose of giving information to others; and hence, when the bird is agitated, it utters cries which are very different, and have no articulation.

A third difference between the language of men and the significant cries of brute animals is, that the former is the product of art, the latter derived from nature. Every human language is learned by imitation, and is intelligible only to those who either inhabit the country where it is vernacular, or have been taught it by a master or by books. But the voices in question are not learned by imitation; and being wholly instinctive, they are intelligible to all the animals of that species by which they are uttered, though brought together from the most distant countries on earth.*

The existence, therefore, of language, is itself a proof of the specific character and unity of humanity of all the races of men among whom language is found.

"The great difference between man and the higher brutes appears to me," says Archbishop Whateley, "to consist in the power of using SIGNS—arbitrary signs—and employing *lan-*

* Encyclopedia Britannica, art. Language. See also the London Quarterly Review, Jan. 1850, pp. 19, 20.

guage as an instrument of thought. We are accustomed to speak of language as useful to man, to *communicate* his thoughts. I consider this as only *one* of the uses of language. That use of language which, though commonly overlooked, is the most characteristic of man, is as an instrument of thought. Man is not the only animal that can make use of language to express what is passing within his mind, and that can understand, more or less, what is so expressed by another. Some brutes can be taught to utter, and many others to understand, more or less imperfectly, sounds expressive of certain emotions. Every one knows that the dog understands the general drift of expressions used; and parrots can be taught not only to pronounce words, but to pronounce them with some consciousness of the general meaning of what they utter. We commonly speak, indeed, of 'saying so-and-so by rote as a parrot;' but it is by no means true that they are quite unconscious of the meaning of the sounds. Parrots do not utter words at random; for they call for food; when displeased, scold; and use expressions in reference to particular persons which they have heard applied to them. They evidently have some notion of the general drift of many expressions which they use. Almost every animal which is capable of being tamed can, in some degree, use language as an indication of what passes within. But no animal has the use of language as an 'instrument of thought.' Man makes use of GENERAL SIGNS in the application of his power of abstraction by which he is enabled to reason; and the use of arbitrary general signs, what logicians call '*common terms*,' with a facility of thus using abstraction at pleasure, is a characteristic of man.

"By the expression 'making use of abstraction,' I do not mean our merely recognising the general character of some individual, not seen before, of a class we are acquainted with; as when, for instance, any one sees for the first time some particular man or horse, and knows that the one is a man, and the other a horse; for this is evidently done by brutes. A bird, for instance, which has been used to fly from men, and

not from oxen, will fly from an individual man whom it has never seen before, and will have no fear of an ox. But this is not having what I call the power of using abstraction at pleasure. It is merely that similar qualities affect animals in a similar way. With certain descriptions of forms are associated ideas of fear or gratification. Thus, a young calf readily comes up to a woman whom it sees for the first time, because a woman has been used to feed it with milk; while the young of wild animals fly from any human being. But I speak of man being able so to use the power of abstraction as to employ SIGNS to denote any or every individual of a certain class.

"It is hardly necessary to add, that I am a decided NOMINALIST. The abstract ideas of which persons speak, and the mere names of which language is represented as furnishing, are things to which I am a stranger. The using of signs of some kind, such as have been above described, the combining and recombining of these in various ways, and the analyzing and constructing of passages wherein they occur, this is what I mean by the employment of language as an instrument of thought; and this is what no brute has arrived at. Brutes have, more or less, the use of language to convey to others what is passing within them. But the power of employing abstraction at pleasure, so as to form 'general signs,' and make use of these signs as an instrument of thought in carrying on the process which is strictly called *Reasoning*, is probably the chief difference of man and the brute." *

But still further, language is also a proof of THE ORIGINAL UNITY of all men. Even Lord Monboddo candidly acknowledges, that if language was invented, it was of very difficult invention, and far beyond the reach of the grossest savages. Accordingly, he holds that though men were originally solitary animals, and had no natural propensity to the social life, yet, before language could be invented, they must have been associated for ages, and have carried on in concert some common work.

* See "On Instinct," Dublin, 1847, pp. 11–20.

Man, however, we may confidently affirm, never could have invented language. Aristotle has defined man to be ζωον μιμητικον, or imitative animal, and the definition is certainly so far just, that man is much more remarkable for imitation than invention ; therefore, had the human race been originally *mutum et turpe pecus*, they would have continued so to the end of time, unless they had been taught to speak by some superior intelligence.

It is now, therefore, generally conceded that language was originally imparted by God, and hence we must conclude, that, as God does not work unnecessary miracles, it was given to one original pair, and not to many in different portions of the earth.*

Language then, every where, and in all cases, proves demonstrably the existence of the same human nature in all who possess it. "The fact," says Isaac Taylor,† "that every language of civilized men comprises a large class of words and phrases dependent one upon another for their meaning, and related closely or remotely to a certain property or function of human nature, and which terms we can by no means dispense with in describing man, as he is distinguished from the terrestrial orders around him ; this fact, attaching universally to the vehicle of thought, affords all the proof which a strict logic would grant of such an identity.

"And what is true of language generally respecting human nature at large, is true in particular of the language of each race, respecting its characteristics, and even its history.

"And it deserves particularly to be noted, that while the language of civilized races at large furnishes evidence on all points touching man's nature, physical, intellectual, and moral, those especial refinements which characterize this or that language, and which have resulted from the eminent attainments

* See Dr Spring on the Obligations of the World to the Bible; Wall's elaborate and learned volumes on the Origin of Alphabetic Writing, vol. i.; and Encyclop. Brit., as above.

† "Responsibility of Man," p. 4, &c.

of the people using it, only serve to exhibit that one rudiment of human nature, as we might say, magnified, and its inner structure expanded.

"Were it, for instance, questioned whether man be an imaginative being, formed to catch analogies, and to be charmed with resemblance, three-fourths of every language, barbarous or civilized, attest the fact; nor is this evidence touched by any instances of what may be false in taste, or factitious in the literature of the people. Or is the question, 'Am I responsible—am I a moral agent—am I to be held accountable for my temper, dispositions, and conduct; and am I so constituted as that a future retribution will be a fit issue of my present course of life?' If this be the question, it is answered at once concisely and conclusively, by simply appealing to the mere words that must be employed to express it. If we suppose, then, our objector to have complied, he stands convinced; at least, if his mind have been trained to habits of logical inquiry, he will not fail to see that in describing the moral nature, with the intent to deny it, he *has unwittingly* affirmed it, and we might say to him,—'more convincing than any syllogisms, or than any discursive argument, in proof of the reality of that moral scheme which you call in question, are the words (considered as products of the human mind) to which you have been compelled to have recourse in announcing your scepticism.' The system we live under is in fact a moral system in the highest sense, *because among all people with whom the human nature has been at all expanded*, a copious vocabulary of terms is found, to which no sense could be assigned in a world of beings, either *purely* spiritual, or *purely* intellectual, or *purely* physical.

"*If man be not a moral agent*, and if his sphere do not immeasurably transcend that of the sentient orders around him, *how comes he to talk as if he were?* If, in regard to a moral system, he be only a brute of finer form, born of the earth, and returning to it, *whence is it that, in respect of virtue and vice, of good and evil*, the dialect of heaven rolls over his lips?

When was it, and how, that he stole the vocabulary of the skies?"

The testimony to the common humanity of every race of men who possess a language, as it is given by that language, is therefore beyond all controversy. "Language," continues this writer, "when combined in continuous discourse, may indeed, and too often does, convey notions totally false and absurd: but language itself, which is at once the engine of cogitation, and the record of all facts permanently or incidentally attaching to human nature: language, the most fallacious of historians, which, while it notes the revolutions of empires, is the enduring type of the visible world, and the shadow of the invisible—the mirror of the universe, as known to man—language never lies; how should it do so, seeing that it is itself the creature and reflection of nature? As well deny that the trees, buildings, rocks, and clouds, painted on the bosom of a tranquil lake, are images of realities; as well do this, as assume that language, in the abstract, has ever belied humanity, or presented any elements foreign to our constitution. Philosophers or teachers may have affirmed, and the multitude may have believed, far more than could be proved; meantime the vehicle they have employed in defining and promulgating such illusions has faithfully embodied the permanent varieties of philosophy and religion, just as a wonder-loving traveller, while he tells a thousand tales of griffons and dragons, sets us right by the dumb testimony of the specimens he has brought with him. Men might as easily create to themselves a sixth sense as fabricate and retain in use a system of terms having no architypes in nature."

This leads us to remark that the unity of the human races is proved not only by their possession of language, which is the high and peculiar attribute of humanity, and by the incontrovertible evidence given in *every* language of all the common attributes of man's intellectual and moral nature, but also by the high degree of perfection to which the lan-

guage of some of the *lowest* tribes of people, considered according to physical qualities, are elevated. Of this we may give an example in the Mpongwee language spoken by numerous tribes in Western Africa.* A communication also appears in the London Literary Gazette, written by Mr Koelle, one of the Sierra Leone agents of the Church Missionary Society, describing the discovery of a written language in the interior of Africa. This discovery was made under the following circumstances:—Captain Forbes, on the station there, being one day on shore near Cape Mount, on or near the northern boundary of the American colony of Liberia, saw some unknown characters on a native house. On making inquiries, he learned that these characters represented the Vy language; and he found a man of the Vy nation who possessed a book, and was able to read the characters. The man remained several days on board the vessel of Captain Forbes, and was seen there by Mr Koelle, who also saw the book and heard him read it. The man stated that the art of writing was communicated to his nation by eight strangers from the interior a long time ago; that schools were instituted, and the people generally taught; but that the inroads of the Portuguese had checked education, and few could now read. Mr Koelle says the alphabet of this language consists of about one hundred letters, each representing a syllable. He gives a short specimen of the alphabet, and a list of about fifty words. The new character is said to have no analogy with any other known.

In a great number of languages, says Mr Duponceau,† of which no grammars or dictionaries yet exist, there are still specimens which afford a tolerable opportunity of estimating their general character and analogies; and as far as these data extend, it would appear that similar laws of construction

* See an article by the Rev. John Leighton Wilson in the Bibliotheca Sacra, and the Journal of the American Ethnological Society; and also Bartlett's Progress of Ethnology, pp. 34, 35.

† See in Prichard, vol. v. p. 306.

are universal among the idioms of the New World. "Many of these languages, as that of the Lenni Lenape in particular, would appear rather from their construction to have been formed by philosophers in closets than by savages in the wilderness." This is an assertion, which, though true, appears improbable, and the author of the remark offers the best defence that can be given. "If it should be asked," he says, "how this can have happened, I can only answer that I have been ordered to collect and ascertain facts, and not to build theories."

Another observation is of importance in this argument, and that is, that similarity of language proves identity of origin among nations of the most contrary physical characters. As this argument, however, has been very elaborately presented by Dr Wiseman, it need not be here very fully developed. The reader is therefore requested to study the first two of this able writer's Lectures on the Connection between Science and Religion. I will in the next chapter proceed to offer some additional illustrations.

CHAPTER XIV.

UNITY OF THE RACES PROVED FROM THE UNIVERSALITY, NATURE, AND CONNECTION OF LANGUAGES—CONCLUDED.

That language should exist at all, and that it should exist among every people and community of the earth, even those lowest in the scale of civilization, is in itself a cogent argument for the unity of man as a species.—LONDON QUARTERLY REVIEW.

The classification of language is, in truth, the classification of mankind. The migration and intermixture of languages are records of the changes and movements of man over the face of the globe.

IN our previous chapter on this subject, we have shown that language is a peculiar characteristic of man, and that it implies by its origin and its nature the possession, in ALL who use it, of the same moral and intellectual powers, and therefore unity both of origin and of specific character. This is confirmed by an examination of the faculties developed in the construction of the languages even of the lowest races, and it is made more certain by the relations found to exist between the languages of races who are now physically the most dissimilar. Of this point we proceed to give some illustrations different from those of Dr Wiseman.

In regard to Africa, Dr Prichard, in his latest additions to his work, says:—"One fact not unimportant in its bearing on the early history of mankind, appears to have been rendered manifest by late researches in Northern Africa. It is a much wider extension over these regions than was heretofore supposed to exist, of tribes bearing an unquestionable, though sometimes remote, affinity in language, and therefore probably in origin, to the Syro-Arabian or Shemite race. This denotes

the very ancient dispersion of an Asiatic population over a great and central part of the African continent. I refer not at present to tribes of Arabian origin, or to such as can be supposed to have entered Africa subsequently to the era of Islam, but to races bearing indications of affinity to the Shemite stock, by far more ancient and more widely spread.

"The resemblances in languages to which I now allude, as existing between the African and the Shemite races, are approximations, not to the modern, but to the most ancient dialects of this latter family of nations."*

"The Hottentot stock," says Dr Latham, "has a better claim to be considered as forming a second species of the genus homo than any other section of mankind. It can be shown, however, that the language is no more different from those of the world in general than they are from each other.

"The fact that both the Galla and Agow languages pass through the Amharic into the more typical Semitic tongues, and that the former (over and above many undeniable points of affinity with the Coptic) is quite as sub-Semitic as the Berber, is one of the many phenomena which break down the broad line of demarcation that is so often drawn between the Semitic and the African nations."†

The nations of particular oases in the Great Desert are like the inhabitants of islands in the ocean. They never move in any considerable numbers from their native spot, nor are they visited by many strangers. They acquire consequently characteristics of physiognomy, through the agency of external conditions, the effect of which accumulates through many generations.

"In one of these oases, namely, that of Wadreag, Mr Hodgson discovered that the people, though Berbers by the evidence of their language, which they speak with purity and correctness, were not only black, as many of the genuine Arabs of the country are known to be, but have

* Prichard, pp. 550, 551, 3d ed. ; and also pp. 557 and 558.

† Latham, pp. 499, 500.

features approaching those of negroes, and hair like that which is the characteristic of the negro race. It was the opinion of Mr Hodgson that these characteristics had been acquired, not as the result of the intermixture of races, which the local circumstances of the tribe seemed to him to preclude, but through the long-continued agency of physical causes upon a tribe of genuine Tuaryk origin, though the ordinary type of that race is almost similar to the Arabian."*

"Again, the Hausan people are negroes; they have hair of the kind termed woolly, and their colour is a jet-black. Their features are remarkably good, and appear to have little resemblance to those of the natives of Guinea. That such a people should betray any relationship to the Shemite nations is a fact so contrary to prejudice and prevailing opinion, that the assertion will not be believed without proofs; and these could not well be displayed in the short space of this Appendix. For the sake of those who feel curious upon the subject, I must beg to refer to an appendix to the fourth volume of my 'Physical History of Mankind,' written by Mr F. Newman, from materials furnished by M. Schœn." †

"The inhabitants of almost every valley or separate plain, or mountainous tract, were supposed to have a language of their own, unconnected with the idioms of their nearest neighbours. Wherever sufficient inquiry has been made, a more accurate acquaintance with facts has proved the fallacy of this opinion, and has shown that a few mother tongues, mostly divided into a variety of dialects, are spread over vast spaces. In proportion as the inquiry has been more accurately pursued, and a scientific examination of languages has advanced, in the same degree the number of languages supposed to be distinct has been from time to time diminished. With the number of separate languages, that of distinct races or families of nations has been in proportion reduced. These observations are, perhaps, in no instance more applicable than they are to the languages and

* Prichard, p. 559. † Ibid., pp. 566 and 567, App.

nations of Africa. If we survey these languages in reference to the present state of our knowledge, we may perhaps venture to say that three-fourths of the whole extent of this continent are occupied by three great families of nations."*

"One objection will be offered to the supposition that all nations who speak the various dialects of this mother tongue are of one origin, and that is, the great extent of their physical diversity. The tribes of the coast of Ajan are, as we have seen, of a jet-black, while the Bechuana are of a light-brown, the Amakosah being somewhat darker. In Kongo there are various complexions. The features also differ. The nomades of the high plains beyond the tropics have often features which approach the Arabian type, and an Arabian origin has been assigned to them, whilst the nations of the Mozambique coast have nearly the negro character. But there is enough that is peculiar in the hair and colour of all these tribes to preclude the notion of an Arabian parentage. On the other hand, the deviation in physical characters is not greater than that which is to be found in the Dekhan among tribes of the native Tamulian family, where we may compare the tall, handsome, and comparatively fair Tudas of the Neilgherry mountains with the puny tribes of black people who are to be found in the low plains of Malabar and Coromandel." †

The same conclusion is deduced from an examination of the tribes of India. In the Niligiri or Neilgherry hills, in the southern part of the Dekhan, towards the junction of the two chains of Ghauts, are various barbarous tribes termed by Mr Hough, who has described them, Thodaurs, Buddagurs, Curumbars, and Kothars. To these must be added the Cohatars, who occupy the summits of hills. In physical character, these races differ greatly among themselves: some of them are small, shrivelled, black savages, who have been thought to resemble the negroes of Africa; others are tall, athletic, and handsome, with features resembling the Euro-

* Prichard, p. 588. † Ibid., pp. 652 and 653.

pean type. These are the inhabitants of the elevated tracts, where a tolerably cool and salubrious climate exists; the blackest and most diminutive tribes are found in the jungle near the rivers, and in low, unhealthy districts. Yet it is probable that most of these tribes are of one aboriginal race, since, when vocabularies of their various dialects have been collected, they have been found generally to bear some traces of affinity to the Tamulian, or its sister languages,—that is, to the idioms of the civilized nations of the Dekhan.

Unity of language also proves unity of origin among all the diversified aboriginal inhabitants of America, from one end of the continent to the other, though among them there is found every variety of form, feature, and complexion. *

We remark further, that the unity of the human races is capable of irresistible proof by another and altogether distinct line of argument, founded upon the unity which has been discovered in all the languages of the earth, of which there are probably not fewer than two thousand. † Languages being the most durable of human monuments, by detecting in their composition common elements and forms of speech, both as it regards the words themselves and also as it regards the grammatical construction, arrangement, and form, we obtain, it has been thought, the most satisfactory evidence of the original identity of those races by which such languages are spoken. ‡ In regard to the natural history of our globe, and facts connected with its physical geography, and the multiplication and dispersion of species both of animals and plants, there are many grounds of uncertainty, since we can never duly appreciate the effects of physical causes operating during a course of ages indefinitely great. But in the case of languages, especially of those which, though no longer spoken, are still preserved,

* See Prichard's Researches, vol. v. pp. 304, 306, and Natural History of Man, App., 3d ed. Also Dr Morton's Crania Americana.

† See Presbyterian Review, 1849, p. 244.

‡ Encyclopedia Brit., vol. vi. p. 274, and Carpenter's Physiology, p. 93.

there is no such element of uncertainty; and hence an analysis of languages, conducted on strict philosophical principles, must lead to the most solid conclusions respecting the aboriginal history of our species.*

"A comparison of languages," says M. Klaproth, "furnishes, in default of history, the only method of distinguishing correctly from each other the different races of people who are spread over the earth." †

The early investigations into this branch of inquiry, like those in geology and ethnology, seemed to be entirely adverse to the representations of Scripture, where we are told that after the flood all men "were of one lip and one speech," and that God "confounded their language that they might not understand one another's speech. So the Lord scattered them abroad from thence upon all the face of the earth . . . . therefore the name of it is called Babel, because the Lord did there confound the languages of all the earth." ‡ The results, however, of maturer and very extensive investigation prove that the 3064 languages of Adelung, and the 860 languages and 5000 dialects of Balbi, may be reduced to eleven families; and that these again are found to be not primitive and independent, but modifications of some original language; and that "the separation between them could not have been caused by any gradual departure or individual development, but by some violent, unusual, and active force, sufficient at once to account for the resemblances and the differences." §

To this truth even profane historians bear witness, and show that it was in the very way described in Scripture that men met the signal punishment of Almighty God. Eupole-

* Encyclopedia Brit., vol. vi. p. 275. These principles, it is here said, are now universally received as almost the only guides in investigating the origin and descent of nations. Also London Quarterly Review for January 1850.

† See also Nolan's Bampton Lectures, p. 322.

‡ Gen. xi. 6–9.

§ See Wiseman's Lectures, lect. i. and ii., for an interesting history of this inquiry, its progress and results.

mus says, "The city of Babel was first founded, and afterwards the celebrated tower; both which were built by some of those people who had escaped the deluge. They were the same who, in after times, were recorded under the character of giants. The tower was at length, by the hand of the Almighty, ruined, and these giants were scattered over the whole earth." Abydenus, in his Assyrian Annals, alludes to the insurrection of the sons of Chus, and to their great impiety. He also mentions the building of the tower and confusion of tongues; and says, in language analogous to the words of Scripture, that the tower was carried up to heaven, but that the gods ruined it by storms and whirlwinds, and frustrated the purpose for which it was designed, and overthrew it upon the heads of those who were employed in the work; that the ruins of it were called Babylon. Before this, there was but one language existing among men, but now they had a manifold sound or utterance. A war soon after ensued between Crotus and Titan. He repeats, that the particular spot where the tower stood was in his time called Babylon. It was so called, he says, from the confusion of tongues, and variations of dialect; for in the Hebrew language such confusion is termed Babel.

"It is interesting," says the Quarterly Review,* "to note how much these discoveries, as well as the classification and nomenclature of languages previously adopted, connect themselves also with the recorded tripartite division of mankind into three great families after the Scriptural deluge. Some of the most remarkable results recently obtained are those which disclose relations, hitherto unsuspected or unproved, between the language of ancient Egypt and the Semitic and Japhetic languages of Asia; thus associating together in probable origin those three great roots which, in their separate diffusion, have spread forms of speech over all the civilized parts of the world. Taking the Japhetian or Indo-Teutonic branch, as it has lately been termed, we find these inquiries

* Jan. 1850.

embracing and completing the connections between the several families of language which compose this eminent division of mankind, already dominant in Europe for a long series of ages, and destined, apparently, through some of its branches, to still more general dominion over the globe. We may mention, as one of the latest examples of the refined analysis of which we are speaking, the complete reduction of the Celtic to the class of Indo-Teutonic languages through the labours of Bopp, Prichard, and Pictet, whereby an eighth family is added to this great stock, and the circle completed which defines their relations to one another and to the other languages of mankind.

"In relation to our argument for the unity of the races, the very multiplicity of languages, therefore, becomes an evidence of common origin. Whatever opinion be held as to the primitive source of language—and many have found cause to consider it of Divine communication—we may fairly presume that the numerous varieties of speech now existing had their origin in the detached localities, and under the various conditions, in which portions of mankind were already spread over the earth. These formations, and the changes they have undergone, have been determined by the faculties, feelings, and social instincts, common to the whole species, and requiring analogous modes of expression by speech. Accordingly, we find that the grammatical relations of different languages, apart from those technical forms which disguise them to ordinary observation, are more certain and closer than the connection by words and roots. Were there more than one species of mankind, and were the type of one race really inferior in its origin to that of another, nothing would be so likely to attest this as the manner of communication of thought and feeling. Language itself would become the surest interpreter of this difference. But its actual varieties, only partially coincident with the degree of civilization and social advancement, offer no such lines of demarcation; and however great the differences, all possess and

manifest in their structure a common relation to the uses and necessities of man."

But in order to illustrate the force of this argument, we will again refer to the various languages of our aboriginal Americans.

"Professor Benjamin Smith Barton," says Mr Delafield,* "was the first to collect and classify American words. After him followed Vater, who, in his Mithridates, published at Leipsic in 1810, carried out the subject in an extended form. The result of their labours is thus stated :—In eighty-three American languages, one hundred and seventy words have been found, the roots of which have been the same in both continents ; and it is easy to perceive that this analogy is not accidental, since it does not rest merely on imitative harmony, or on that conformity of organs which produces almost an identity in the first sounds articulated by children. Of these, three-fifths resemble the Mantchou, Tongonese, Mongol, and Samoiede languages ; and two-fifths the Celtic, Tchoud, Biscayan, Coptic, and Congo languages."

"The inquiry may here be made, 'What number of words, found to resemble one another in different languages, will warrant our concluding them to be of common origin?' The learned Dr Young applied to this subject the mathematical test of his calculus of probabilities, and says it would appear therefrom that nothing whatever could be inferred with respect to the relation of any two languages, from the coincidence of sense of any single word in both of them ; the odds would be three to one against the agreement of any two words; but if three words appear to be identical, it would be then more than ten to one that they must be derived in both cases from some parent language, or introduced in some other manner ; six words would give more than seventeen hundred chances to one ; and eight, near one hundred thousand ; so that, in these cases, the evidence would be little short of absolute certainty.

* Antiq. of America, pp. 70, 71.

"Ethnography, then, has furnished conclusive evidence that the family of American languages has had a common origin with that of Asia. A lexical comparison has established an identity in one hundred and seventy words, although this study is in its infancy; and this, relying on the correctness of Dr Young's mathematical calculation, is an argument which cannot be controverted.

"In reviewing, then, the results to which philology inevitably brings us, and of which but a few instances are here adduced, we are obliged to refer the savage and larger portion of America to the North of Asia, and the civilized family of Mexico and Peru to ancient Egypt and Southern Asia." *

The unity of all human languages, therefore, is a conclusive proof of the unity of all the human races.

"All dialects," says the Petersburg Academy, "are to be considered as dialects of one now lost." "The universal affinity of languages," says Klaproth, "is placed in so strong a light, that it must be considered by all as completely demonstrated." "There is a great probability," says Herder, while sceptical of the Mosaic record, "that the human race and language therewith go back to one common stock, to a first man, and not to several dispersed in different parts of the world." "The books of Moses," says Balbi, "no monument either historical or astronomical has yet been able to prove false; but with them, on the contrary, agree, in the most

* On the Eastern Origin of the Americans, see Delafield's Antiquities of America, 4th ed., N. Y., 1839; Hamilton Smith's Nat. Hist. of the Human Species, p. 237, &c.; Boudinot's Star in the West; Franklin Smith on the Origin of the American Indian; Pickering on the Races; Prichard's Researches, vol. v. pp. 289–546; Drake's Book of the Indians, ch. i. and ii.; Humboldt, Gallatin, and Von Martius (see quoted in Prichard, vol. v. pp. 300 and 305); Bishop England's Works, vol. iv. pp. 469, 470; Dr Bachman, pp. 269–277; Dr Laing of Sydney; Ethnol. Journal; Etudes de Platon, par Henry Martin, Paris, 1841; and Humboldt on the Discovery of America, &c., &c. See also Martin's Nat. Hist. of Man and Monkey, p. 314, and Lesson, Humboldt, Dr Laing, Dr Graves, and Bary, there quoted, p. 316, &c. Dr Latham's vol. is particularly full on American languages, &c. See Variations of Man.

remarkable manner, the results obtained by the most learned philologers and the profoundest geometricians."

"Are all the alphabets," asks Dr Latham, "that have ever been used referable to one single prototype as their ultimate original, or has the process of analysing a language into its elementary articulations, and expressing these by symbols, been gone through more than once? The answer to this is partially a measure of the intellectual influence of the Semitic nations. Great would be that influence even if only the Greeks and Romans had adopted the alphabet of the Phœnicians. How much greater if the world at large had done so!

"The doctrine of a single prototype is the most probable. For the present alphabets of Europe the investigation is plain enough—indeed, they are all so undeniably of either Greek or Roman origin, that doubt upon the matter is out of the question."*

"Upon the whole, it may be safely said that no known alphabet, except the Semitic, has any very strong claims to be considered as an original and independent invention."†

"We cannot better express the general conclusion to which we are conducted by the study of the various forms of human language," says the Edinburgh Review, after giving an analysis of the various languages of men, "than in the words of Chev. Bunsen. After stating the two possible hypotheses—first, that there has been a great number of beginnings, out of which different tribes have sprung, and with them different languages,—each doing originally the same work, and continuing and advancing it more or less according to its particular task, its natural powers, and its historical destinies; and, second, that the beginning of speech was made only once, in the beginning of human time, in the dawn of the mental day, by one favoured race, in a genial place of the earth, the garden of Asia—he thus continues:—'If the first supposition be true, the different tribes or

* Latham, pp. 520, 521. † Ibid., p. 524.

families of languages, however analogous they may be (as being the produce of the same human mind, upon the same outward world, by the same organic means), will nevertheless offer scarcely any affinity to each other, in the skill displayed in their formation and in the mode of it; but their very roots, full or empty ones, and all their words, whether monosyllabic or polysyllabic, must needs be entirely different. There may be some similar expressions, in those inarticulate bursts of feeling not reacted on by the mind, which grammarians call interjections. There are, besides, some graphic imitations of external sounds, called onomatopœtica, words the formation of which indicates the relatively greatest passivity of the mind. There may be, besides, some casual coincidences in real words; but the law of combination applied to the elements of sound gives a mathematical proof that, with all allowances, such a chance is less than one in a million for the same combination of sounds signifying the same precise object. What we shall have to say hereafter about the affixing of words to objects, will show that this chance is considerably diminished, if the very strict and positive laws are considered which govern the application of a word to a given object. But the ordinary crude method suffices to prove that if there are entirely different beginnings of speech, as philosophical inquiry is allowed to assume, and as the great philosophers of antiquity have assumed, there can be none but stray coincidences between words of a different origin. Now, referring to what we have already stated as the result of the most accurate linguistic inquiries, such a coincidence does exist between three great families, spreading from the north of Europe to the tropic lands of Asia and Africa. It there exists, not only in radical words, but even in what must appear as the work of an exclusively peculiar coinage, the formative words and inflections which pervade the whole structure of certain families of languages, and are interwoven, as it were, with every sentence pronounced in every one of their branches. All the nations which, from the dawn of history to our days,

have been the leaders of civilization in Asia, Europe, and Africa, must consequently have had one beginning. This is the chief lesson which the knowledge of the Egyptian language teaches us.' "

This statement, having especial reference to the Semitic, Japhetic, and Chametic languages only, is, of course, equally true of those still more widely diffused forms of speech which are referable to the Turanian stock, that stock being itself, in Chev. Bunsen's estimation, a branch of the Japhetic. And thus, in a very unexpected manner, we find Egyptological researches have greatly contributed to establish the doctrine of a common origin of all the languages of the globe; and strengthen, therefore, the hypothesis of the original unity of mankind. *

NOTE.

AMERICA—ITS LANGUAGES AND TRIBES.

"The observed facts which first had a tendency to disturb the notion of the unity of the American tribes were, most probably," says Dr Latham,† "those connected with the languages. These really differ from each other to a very remarkable extent,—an extent which, to any partial investigator, seems unparalleled; but an extent which the general philologist finds to be no greater than that which occurs in Caucasus, in the Indo-Chinese frontier, and in many parts of Africa."

"The likeness in the grammars," says Mr Latham, "has been generally considered to override the difference in the vocabularies: so that the American languages are considered to supply an argument in favour of the unity of the American population stronger than the one which they suggest against it. The evidence of language, then, is in favour of the unity of all the American populations, the Eskimo not excepted."

* See Dr Wiseman's Lectures, p. 67, et preced. and p. 86; Redford's Scripture Verified, Lect. ii. pp. 152–175, &c., and p. 55, &c.; Abel Remusat, quoted in Wiseman, pp. 73, 74; Herder as quoted also in do. p. 73; Niebuhr, in ibid., p. 75; and Edinb. Rev., Oct. 1846, p. 186, Am. ed., and London Quar. Rev., Jan. 1850.

† Latham, pp. 352, 354, 355, 356, 357, 451–454, 459.

"Different," says Vater, "as may be the languages of America from each other, the discrepancy extends to words or roots only, the general internal or grammatical structure being the same for all." Of course, this grammatical structure must, in and of itself, be stamped with some very remarkable characteristics. It must differ from those of the whole world. Its verbs must be different from other verbs, its substantives other than the substantives of Europe, its adjectives unlike the adjectives of Asia. It must be this, or something like this; otherwise its identity of character goes for nothing, inasmuch as a common grammatical structure, in respect to common grammatical elements, is nothing more than what occurs all the world over. At present it is enough to say, that such either was or appeared to be the case. "In Greenland," writes Vater, "as well as in Peru, on the Hudson river, in Massachusets as well as in Mexico, and so far as the banks of the Orinoco, languages are spoken displaying forms more artfully distinguished and more numerous than almost any other idioms in the world possess." "When we consider these artfully and laboriously contrived languages, which though existing at points separated from each other by so many hundreds of miles, have assumed a character not less remarkably similar among themselves than different from the principles of all other languages, it is certainly the most natural conclusion that these common methods of construction have their origin from a single point,—that there has been one general source from which the culture of languages in America has been diffused, and which has been the common centre of its diversified idioms."

"In America," says Humboldt, "from the country of the Eskimo to the banks of the Orinoco, and again, from these torrid banks to the frozen climate of the Straits of Magellan, mother tongues, entirely different with regard to their roots, have, if we may use the expression, the same physiognomy. Striking analogies of grammatical construction are acknowledged, not only in the more perfect languages, as that of the Incas, the Aymara, the Guarani, the Mexican, and the Cora, but also in languages extremely rude. Idioms, the roots of which do not resemble each other more than the roots of the Sclavonian and Biscayan, have those resemblances of internal mechanism which are found in the Sanscrit, the Persian, the Greek, and the German languages. Almost every where in the New World we recognise a multiplicity of forms and tenses in the verb, an industrious artifice to indicate beforehand, either by inflection of the personal pronouns which form the termination of the verb or by intercalated suffix, the nature and the relation of its object and its subject, and to distinguish whether the object be animate or inanimate, of the masculine or the feminine gender, simple or complex in number. It is on account of this general analogy of structure, it is because American

languages, which have no words in common,—the Mexican, for instance, and the Juichua,—resemble each other by their organization, and form complete contrasts with the languages of Latin Europe, that the Indians of the missions familiarize themselves more easily with other American idioms than with the language of the mistress country."

"The details of the ethnology of America," says Mr Latham, "after a long investigation, having been thus imperfectly exhibited, the first of the two questions indicated in pp. 351, 352, still stands over for consideration:—

"A. The unity (or non-unity) of the American populations one amongst another; and

"B. The unity (or non-unity) of the American populations as compared with those of the Old World.

"In p. 351, it is stated that the two (three) sections of the American aborigines which interfere with the belief that the American stock is fundamentally one, are—

"I. The Eskimo.

"II. The Peruvians (and Mexicans.)

"I. Taking the Eskimo first, the evidence in favour of their isolation is physical and moral.

"The latter, I think, is worth little, except in the way of cumulative evidence, *i.e.*, when taken along with other facts of a more definite and tangible sort. The Eskimo civilization (such as it is) is different from that of the other Americans; and how could it be otherwise, when we consider their Arctic habitat, their piscatory habits, and the differences of their faunas and floras? It is not lower, *i.e.*, not lower than that of the ruder Indians, a point well illustrated in Dr King's paper on the Industrial Arts of the Eskimo!

"The physical difference is of more importance.

"And first, as to stature.—Instead of being shorter, the Eskimo are in reality taller than half the tribes of South America.

"Next, as to colour.—The Eskimo are not copper-coloured. Neither are the Americans in general. It is only best known in those that are typical of the so-called Red race; there being but little of the copper tinge when we get beyond the Algonkins and Iroquois.

"Lastly, as to the conformation of the skull, a point where (with great deference) I differ from the author of the excellent Crania Americana.—The Americans are said to be brakley-cephalic, the Eskimo dolikho-cephalic. The American skull is of smaller, the Eskimo of larger dimensions. I make no comment upon the second of these opinions. In respect to the first, I submit to the reader the following extracts from Dr Morton's own valuable tables, premising that, as a general rule, the difference between the occipitofrontal and parietal diameters of the Eskimo is more than

seven inches and a fraction, as compared with five inches and a fraction; and that of the other Indians less than seven and a fraction, as compared with five and a fraction. The language, as before stated, is admitted to be the American, in respect to its grammatical structure, and can be shown to be so in respect to its vocables.

"II. The Peruvians.—Here the question is more complex, the argument varying with the extent we give to the class represented by the Peruvians, and according to the test we take, *i. e.*, according as we separate them from the other Americans, on the score of a superior civilization, or on the score of a different physical conformation.

"A. When we separate the Peruvians from the other Americans, on the score of a superior civilization, we generally take something more than the proper Peruvians, and include the Mexicans in the same category. I do not trouble the reader with telling him what the Peruvio-Mexican or Mexico-Peruvian civilization was; the excellent historical works of Prescott show this. I only indicate two points:—

"1. The probability of its being over-valued.

"2. The fact of its superiority being a matter of degree rather than kind," &c. (See pp. 454 to 459.)

What breaks down, he concludes, the distinctions between the Peruvian and Eskimo, breaks down a portion of all those lesser ones by which the other members of the American population have been separated from each other.

"In the consolidation of the Mexican empire," says Dr Latham, "I see nothing that differs in kind from the confederacies of the Indians of the Algonkin, Sioux, and Cherokee families, although in degree it had obtained a higher development than has yet appeared; and I think that whoever will take the trouble to compare Strachey's account of Virginia, where the empire of Powhatten had at the time of the colonization obtained its height, with Prescott's Mexico, will find reason for breaking down that over-broad line of demarcation which is so frequently drawn between the Mexicans and the other Americans.

"I think, too, that the social peculiarities of the Mexicans of Montezuma are not more remarkable than the external conditions of climate, soil, and land and sea relations; for it must be remembered that, as determining influences towards the state in which they were found by Cortez, we have—

"1. The contiguity of two oceans.

"2. The range of temperature, arising from the differences of altitude produced by the existence of great elevation, combined with an intertropical latitude, and the consequent variety of products.

"3. The absence of the conditions of a hunter state, the range of the buffalo not extending so far as the Anahuac.

"4. The abundance of minerals.

"Surely these are sufficient predisposing causes for a very considerable amount of difference in the social and civilizational development." *

* Latham, pp. 408, 409.

CHAPTER XV.

THE UNITY OF THE RACES SUSTAINED BY THE TESTIMONY OF HISTORY AND TRADITION.

Μαρτυροισι δε μου τῳ λογῳ παντες οἱ παρ' Ἑλλησι και παρα βαρβαροις συγγραψαμενοι τας ἀρχαιολογιας.—JOSEPHUS.

Ex infinita societate generis humani.—CICERO.

Ex annalium vetustate et monumentis eruenda est memoria.—CICERO.

It is no longer probable only, but it is absolutely certain, that the whole race of man proceeded from Iran as from a centre, whence they migrated at first in three great colonies; and that those three branches grew from a common stock, which had been miraculously preserved in a general convulsion and inundation of the globe.—SIR W. JONES.

The only certain means by which nations can indulge their curiosity in researches concerning their remote origin is to consider the language, manners, and customs of their ancestors, and to compare them with those of the neighbouring nations.—HUME'S HIST. OF ENG., vol. i. p. 1.

ANOTHER branch of evidence confirmatory of the doctrine of the unity of the human races, to which we now proceed, is derived from history.

"Ethnology divides itself into two principal departments, the Scientific and the Historic. Under the former is comprised every thing connected with the natural history of man, and the fundamental law of living organisms; under the latter, every fact in civil history which has any important bearing, directly or indirectly, upon the question of races—every fact calculated to throw light upon the number, the moral or physical peculiarities, the early seats, migrations, conquests, or interblendings of the primary divisions of the human family,

or of the leading mixed races which have sprung from their intermarriages."*

Adelung, in his great work on Language, has summed up what history discloses to us on this subject. "Asia," says he, "has been in all times regarded as the country where the human race had its beginning, received its first education, and from which its increase was spread over the rest of the globe. Tracing the people up to tribes, and tribes up to families, we are conducted at last, if not by history, at least by the tradition of all old people, to a single pair, from which families, tribes, and nations have been successively produced. The question has been often asked, What was this first family, and the first people descending from it? Where was it settled? and how has it extended so as to fill the four large divisions of the globe? It is a question of fact, and must be answered from history. But history is silent; her first books have been destroyed by time; and the few lines preserved by Moses are rather calculated to excite than satisfy our curiosity."

Such is the uniform and unvarying testimony of history. It traces up all the nations of the earth, like streams, to a common fountain, and it places that fountain in some oriental country in or near the tropics. "I trace," says Sir William Jones, "to one centre the three great families from which the families of Asia appear to have proceeded." "Thus, then," he adds, "have we proved, that the inhabitants of Asia, and consequently, as it might be proved, of the whole earth, sprang from three branches of one stem; and that those branches have shot into their present state of luxuriance in a period comparatively short, is apparent from a fact universally acknowledged, that we find no certain monument, or even probable tradition, of nations planted, empires and states raised, laws enacted, cities built, navigation improved, commerce encouraged, arts invented, or letters contrived, above twelve, or at most fifteen or sixteen centuries before

* Ethnological Journal, No. i., pp. 1, 2.

the birth of Christ; and from another fact, which cannot be controverted, that seven hundred or a thousand years would have been fully adequate to the supposed propagation, diffusion, and establishment of the human race."*

"The history of the world," says Dr Goodman, "as presented to us by the most authentic records, or by the voice of universal tradition, leads us inevitably to conclude, that from some point in the Eastern continent the human race originated, and gradually extended in various directions, subject to the influence of all accidents, of place, climate, disease, and facility or difficulty in procuring food; hence, notwithstanding that the connection of many nations with the parent stock is entirely lost, there is not the slightest evidence that such nations are derived from any but the source we have stated."†

"We do not know," says Wilhelm Von Humboldt, in an unpublished work, on the Varieties of Languages and Nations, "either from history or from authentic tradition, any period of time in which the human race has not been divided into social groups. Whether the gregarious condition was original or of subsequent occurrence, we have no historic evidence to show. The separate mythical relations found to exist, independently of one another, in different parts of the earth, appear to refute the first hypothesis, and concur in

* Colonel Chesney, who commanded an expedition sent, a few years back, by the British Government, to explore the Euphrates, has introduced into his narrative, recently published, speculations on the probable site of Paradise, which he believes he has satisfactorily ascertained to be Central Armenia; and "the Land of Eden" is there actually laid down on the index map. He identifies the Halys and Araxes, whose source exists within a short distance of the Euphrates and Tigris, with the Pison and Gihon of Scripture, while he considers the country within the Halys as the land Havilah, and that which borders on the land Araxes, as the remarkable and much-disputed territory of Cush.—*Scientific American.*

† American Natural History, vol. i., pp. 19, 20. See also Sir Humphrey Davy's Consolations in Travel; Sir William Jones's Discourse on Origin and Families of Nations, in Wks., vol. iii., pp. 185, 191, 194; Redford's Scripture Verified, pp. 175–195; Sharon Turner's Sacred History of the World, vol. ii.; Faber's Eight Dissertations, and his other works.

ascribing the generation of the whole human race to the union of one human pair. The general prevalence of this myth has caused it to be regarded as a traditionary record transmitted from the primitive man to his descendants."*

To these authorities may be added the testimony of Hamilton Smith.† "Although," says he, "in Central Asia no very distinct evidence of a general diluvian action, so late as to involve the fate of many nations, can be detected; still there cannot be a doubt, that with scarce an opposable circumstance, all man's historical dogmatic knowledge and traditionary records, all his acquirements, inventions, and domestic possessions, point to that locality as connected with a great cataclysis, and as the scene where human development took its first most evident distribution." He then proceeds to show that every thing which man has found most essential in the animal and vegetable kingdom is natural to that part of the world, and remarks:—"It would be vain to look for so many primitive elements of human subsistence, in a social state, in any other portion of the globe. Nearly all of them were originally wanting in the Western Caucasus; and the civilized development of Egypt could not have occurred without the possession of wheat, barley, flax, the leek, garlic, onion, and many other objects, all foreign to Africa. These can have been brought westward only by colonies practically acquainted with their value."‡

The same view of ancient history is taken by Guyot in his recent lectures.§ "Western Asia," he affirms, "is the original country of the white race, the most perfect in body and mind. If, taking tradition for our guide, we follow step by step the march of the primitive nations, as we ascend to their point of departure, it is to the very centre of this plateau that they irresistibly lead us. Now, it is in this central part also, in Upper Armenia and in Persia, if you remember, that we

* See Cosmos, p. 360, vol. i. † Natural History of Man, p. 171.
‡ Ibid., p. 173. See also pp. 169–171, 181–185.
§ Earth and Man, pp. 269, 276, &c.

find the purest type of the historical nations. Thence we behold them descend into the arable plains, and spread towards all the quarters of the horizon. The ancient people of Assyria and Babylonia pass down the Euphrates and the Tygris into the plains of the South, and then unfold, perhaps, the most ancient of all human civilization. First, the Zena nation dwells along the Araxes; then, by the road of the plateau, proceeds to found, in the plains of the Oxus, one of the most remarkable and the most mysterious of the primitive communities of Asia. A branch of the same people, or a kindred people—the intimate connection of their language confirms it—descends into India, and there puts forth that brilliant and flourishing civilization of the Brahmins, of which we have already spoken. Arabia and the North of Africa receive their inhabitants by Soristan; South Europe perhaps by the same route through Asia Minor; the North, finally, through the Caucasus, whence issue in succession the Celts, the Germans, and many other tribes, who hold in reserve their native vigour for the future destinies of this continent. There, then, is the cradle of the white race, at least of the historical people, if it is not that of all mankind.

"The examination we have made of the structure of the northern continents, considered in respect of the influence they exercise through their physical nature upon the condition of human societies, enables us to judge in advance that they are formed to act different parts in the education of mankind. It remains to be seen whether the course of history will confirm these anticipations. Now, if we find a real concordance, a harmony between these two orders of facts, we may fearlessly assert that these differences of physical organization were intentional, and prepared for this end by Him who controls the destinies of the world.

"The first glance we cast upon the annals of the nations enables us to perceive a singular but incontestable fact, that the civilizations representing the highest degree of culture

ever attained by man, at the different periods of his history, do not succeed each other in the same place, but pass from one country to another, from one continent to another, following a certain order. This order may be called the geographical march of history."

"Again," says Guyot, "tradition every where represents the earliest race descending, it is true, from the high table-lands of this continent; but it is in the low and fertile plains lying at their feet, with which we are already acquainted, that they unite themselves for the first time in national bodies, in tribes with fixed habitations, devoting themselves to husbandry, building cities, cultivating the arts; in a word, forming well-regulated societies. The traditions of the Chinese place the first progenitors of that people on the high table-land, whence the great rivers flow; they make them advance, station by station, as far as the shores of the ocean. The people of the Brahmins came down from the regions of the Hindo-Kue and from Cashmere into the plains of the Indus and the Ganges; Assyria and Bactriana receive their inhabitants from the table-lands of Armenia and Persia. Each of them finds upon its own soil all that is necessary for a brilliant exhibition of its resources. We see those nations come rapidly, and reach, in the remotest antiquity, a degree of culture of which the temples and the monuments of Egypt and of India, and the recently discovered palaces of Nineveh, are living and glorious witnesses.

"Great nations, then, are separately formed in each of their areas, circumscribed by nature within natural limits. Each has its religion, its social principles, its civilization, severally. But nature, as we have seen, has separated them; little intercourse is established between them; the social principle on which they are founded is exhausted by the very formation of the social state which they enjoy, and is never removed. Now, God has revealed himself to man, has made known to him his will, and pointed out the path which he ought to have followed. The Creator himself con-

descended to guide the steps of the creature upon the long journey he had to travel. This is what the Bible tells us; this is confirmed by the vague memorials of all the primitive nations, whose eldest traditions—those antecedent to the philosophical theogonies prevalent at a later period, and giving them their specific character—contain always some disfigured fragment of this divine history."

Mr Pickering presents many striking considerations in favour of a central origin of the human family, and to show that the most remote must have had former intercourse with the most central,* and also that there is nothing contravening the idea of a single source of the invention of language in the multitude of languages in India and America. He points out also natural passages, by sea and land, for migrations to the different parts of the earth, in chapters xvii. and xviii. He shows that, as all animals are adapted to their natural localities, man must have originated in a warm climate, and that there has been a time when the human family had not strayed beyond these geographical limits. This he proves by another argument, founded on the physical discordance of man to the region of the frosty Caucasus. On zoological grounds, the human family, he believes, is also foreign to the American continent. Other reasons exclude New Guinea, Madagascar, Ceylon. All men, however, he thinks, could proceed from Africa and the East Indies.†

A further confirmation of the Scriptural doctrine of the primitive unity of the human races is found in the fact, which history attests, that the earliest condition of all ancient nations was the most civilized. On this point we offer some observations presented by the Ethnological Journal. "Connecting these several results," says that Journal,‡ "we are led to the conclusion that all ancient civilization must have sprung from some common centre, however difficult or impossible it

* Races of Man, pp. 231–285 and 298.
† Ibid., pp. 283, 302, 303, 305, 330.
‡ No. v., pp. 152-156.

may be to say where or what that centre was. If we look to the earliest historical traditions, we find that they date their origin, not from periods of barbarism, but from periods of high civilization. Menes, the first mortal king of Egypt, was a great conqueror. Some of his immediate successors are stated to have built pyramids, and such like mighty works. Some of the writings attributed to Zoroaster plainly evince a most remote antiquity; and these writings point to a still older religion, of which the creed of Zoroaster was a reformation or reconstruction. It is needless to specify any of the chronological traditions of the Chaldean, Hindu, or Chinese nations; every one knows that they vie with those of Egypt in their pretensions to antiquity. That these pretensions are not wholly without foundation—that a degree of civilization existed in times long anterior to the commencement of regular history, is a position which cannot be much longer denied. It was not by barbarians that the pyramids, temples, and other vast works of Africa, were erected; and yet the more searching is our inquiry into their origin, the more distant does this appear to be. The cave-temples of India are the remnants of a civilization whose memory has wholly perished; while neither the traditions or history of Italy or Greece enable us even to conjecture who were the nations that erected their Cyclopean buildings. Even in the New World, the kingdoms destroyed by the Spaniards were founded on the ruins of far mightier empires, whose shattered works speak of a civilization and a power rivalling in greatness and in antiquity that of Egypt itself.

"Religious institutions and languages are equally unequivocal in showing the wonderful extent of this ancient civilization. In India, in Japan, and even in the Polynesian Islands, we find existing to the present times, and reaching back into the remote past, systems of sacerdotal power quite similar to those of ancient Egypt, and supported by doctrines and mythologies fundamentally the same. In Peru, especially, the Spaniards put an end to a race of pontiffs—kings, the

very counterparts of the first sovereigns of Egypt. But it is not only in civilized and partially civilized countries that we find traces of the old religions and mythologies: we are perpetually startled by their occurrence when investigating the superstitions of the most remote and barbarous tribes. In Europe and Asia we meet them among the Northern Fins, and Laplanders, and Samoides, and Ostiachs, and Tongonisi; we meet them in New Zealand, and in numerous other islands of the Pacific; we meet them in the wilds of North America. And wherever we meet them, we also meet numerous words derived from the very languages to which the antique civilization can be traced.

"Another point worthy of consideration is, that the farther back we remount into ancient times, in any of the great centres of civilization, the more vast do we find the vestiges of their power, the more pure and elevated the traditions of their philosophy. The greatest works of modern times, however striking the scientific skill displayed in them, are, with few exceptions, far inferior, in point of grandeur, to corresponding productions of Greek or Roman art; while these latter, however exquisite in artistic beauty, are insignificant, in point of vastness, when compared with the labour of traditional and antitraditional antiquity.

"Time has developed skill and science, and, in some instances, taste also; but the instructors and rulers of men in the earlier ages of the earth must have had, in general, more capacious minds, a loftier ambition, and a vaster or more available dominion over men, than those of later ages. This mental elevation is as strongly marked in what we know of their opinions, as in the remnants of their architecture. In profane writing, we every where find that the sublimest philosophy and the purest morality is that which is most ancient. The moderns, except in those cases in which an improved science has come to their aid, have produced nothing superior to the speculations of the sages of Greece; while these latter openly professed to be the collectors and interpreters of the

wisdom of still remoter times. In the ages which we are in the habit of naming antiquity, we find that the men then living invariably regarded themselves as having fallen upon late and evil days. Though conscious of having recently emerged from that state of semi-barbarism called the heroic age, they were convinced, at the same time, that that state had arisen from the ruins of a previous and great civilization which the hand of time had still spared. Thus Hesiod tells us that he lived in the iron age—an age of extreme degeneracy, and that this age had succeeded that of heroes and demi-gods; but, at the same time, he informs us that this latter had been preceded by three other great periods—the brazen, the silver, and the golden ages. It is to this golden era, the most remote of all, that the ancients invariably looked for the origin of all their sublime knowledge."*

Geology has reluctantly, but very emphatically, testified

* On the Primitive Condition of Man as more Civilized than its Subsequent, see Smith's Patriarchal Age, Prel. Dissert., pp. 43–85, and the authorities there quoted. Hamilton Smith admits that the style of building, drawing, and sculpture is most perfect in the oldest monuments, and less so in those that are later. On the Human Species, p. 130. This is true also of religion. Mr Pickering, on the Races of Men, ch. xxv., p. 349, &c., shows that the early architecture, caves, and painting of India, with nothing borrowed from Greece or Egypt, exhibit a surprisingly high state of civilization, surpassing the conceptions of the present day. So in Egypt (p. 370) the earliest monuments indicate high civilization, manifesting that idolatry and polytheism were not found till the Pharaonic age (p. 272). See also Harris's Man Primeval, ch. iii., sect. ix., p. 166, &c.; and Whately's Political Economy, lect. v. and vi., p. 102, 3d ed.; Smith's Essay on the Variety of Complexion in Man ; Smith's Patriarchal Age, ch. i., Introd. Triplicity, vol. ii., p. 301, &c.; Records of Creation, by Sumner, pp. 351, 361, vol. i. ; Johnes' Philological Proofs of the Unity of the Race, p. xxvii. ; Pye Smith's Geology, p. 351. "Who," asks the German philosopher Fichte, "educated the first human pair? A spirit took them under his care, as is laid down in an ancient venerable original document, which contains the deepest and the sublimest wisdom, and presents results to which all philosophy must at last return." See also the remarkable argument on this subject against Hume, and so highly valued by him, in Hume's Life, vol. ii., and in Two Letters on the Savage State, 1792. See also Havernick's Introd. to the Pentateuch, pp. 103, 104, and 108; and Latham's Var. of Man, pp. 56, 60, 141, 142, 232.

that no traces of man can be found until a period agreeing precisely with the Mosaic record. *

Chronology has been brought by the independent and scientific researches of philosophers—many of them also declared unbelievers—into a most singular and unexpected identity with this authoritative document, and proves that there is no real chronology and no true history earlier than that of the inspired historian.† Few national histories can be traced even so far back as the age of Abraham, and most assuredly none prior to the Mosaic date of the confusion and dispersion of Babel. The plain of Shinar, then, was the true nursery and cradle of mankind. From hence, as from a fountain in the mountain's side, small at first, but rapidly increasing, all the streams of human population have flowed and diverged. From the event of their confused speech and necessary dispersion, immediately commenced the diverse nations which sprang up in India, Egypt, Assyria, and China, mature and mighty, almost at once, and fulfilling the renewed benediction of their Creator, "to be fruitful and multiply, and replenish the earth."‡

As the Bible declares that by the three sons of Noah the whole earth was peopled, so is it true that most, if not all, the known inhabitants of the earth can be, and indeed have been, traced up to the one or other of these three roots, and thus verify, in their permanent condition and destiny, the prophecy made by Noah and preserved by Moses respecting the future posterity of Shem, Ham, and Japhet.§ And while

* See Lyell's Principles of Geology; Mantell's Wonders of Geology; London Quarterly Review, Jan. 1850, art. 1, &c.

† This leaves the question of the Septuagint or Hebrew chronology free and open.

‡ See a review of the efforts made to extend chronology and history by the Egyptians, Chinese, &c., in Redford's Scripture Verified, pp. 175–195; Hale's Analysis of Chronology; Prichard's Analysis of Egyptian Mythology, Appendix; The Truth of Christianity Demonstrated, by Murray; and Stillingfleet's Origines Sacra, chap. i. and chap. ii., b. 1.

§ See Sharon Turner's Sacred History of the World, vol. ii., p. 480, &c.; Redford, as above, p. 182; Davies' Lectures on Prophecy, Lond., 1836,

many of the nations of the earth were settled in their present countries before the period of historical tradition, and not a few maintain that their ancestors were natives of the country, "still, however," says Schlegel, "their languages are manifestly nearer or more distant varieties of a single mother-tongue, spoken by one family of people, and prove that, in a distant and indeterminate antiquity, emigration took place over wide tracts of country from a common and original abode. This is no hypothesis," he adds, "but a fact clearly made out,—though not resting upon testimony which can no longer be denied,—in our researches into primeval history."*

We proceed, therefore, to remark, in the next place, that we find another and a very strong confirmation of the doctrine of the original identity and unity of the human races, in universal tradition. Hume asserted "that the Books of Moses are corroborated by no concurring testimony." Dr Campbell answered, "As little is it invalidated by any contradictory testimony; and for this plain reason, because there is no human composition that can be compared with this, in respect of antiquity." But are the Books of Moses without collateral evidence? Thales measured the height of the pyramids by the length of their shadows. What if we measure the truth of the facts narrated by Moses by the number and variety of the traditions among all nations concerning them?

In speaking of the generation of the subordinate deities, Plato says: "We must believe those who have spoken before, because they must be conceived to have known their own ancestors." He appealed therefore to "ancient story," and "learning hoary with time;" and presents some traditional doctrines which can only be explained as the wide-spread knowledge resulting from a divine revelation.

lect. iii., on Noah's Prophecy; Faber's Eight Dissertations, vol. i.; Nolan's Bampton Lectures, lect. viii., and Notes on the same; also Croly's Divine Providence, p. 289.

* Preface to Prichard's Egyptian Mythology, pp. xix. and xx.

We find, therefore, a valid and irresistible argument in the preservation—among men of every colour, character, and condition; of every age, country, and climate; and of every degree of civilization or barbarity—of TRADITIONS which verify and confirm the records of the Bible, and connect men of every nation, country, tribe, and people, with the events there detailed. The primitive condition of mankind, the purity and happiness of the golden age,—the location of man in a garden—the tree of knowledge of good and evil—the influence of a serpent in the seduction and ruin of man—the consequent curse inflicted on man, on woman, and upon the earth—the promise of an incarnate Redeemer; traditions respecting Cain and Abel, Enoch and Noah, the longevity of the ancient patriarchs, and the existence of ten generations from Adam to Noah—the growing deterioration of human nature—the reduction of man's age and power—the deluge and destruction of all mankind except a single family—the building of an ark and its resting on a mountain, and the flying of the dove—the building of the tower of Babel and the miraculous confusion of languages—the institution of sacrifices—the rainbow as a sign and symbol of destruction and of hope—the fable of the man in the moon, which is equally known in opposite quarters of the globe—the great mother, who is a mythos of the ark—the hermaphroditic unity of all the gods and goddesses from a mistaken notion of the creation of Adam and Eve—the nature and purport of the mysteries in the Old and New World—groves, and mountains, and caves, as places of worship;* traditions also of Sodom and Gomorrah, of Abraham, Isaac, Jacob, Joseph, Moses, and the Red Sea—the division of time by weeks—and the expectation of a future conflagration of the earth†—these and many other facts, which lie at the

* See Faber's Orig. of Idolatry, vol. iii., pp. 16, 17.—Ibid., ch. iii.—Ibid., ch. iv., pp. 60–92.—Ibid., ch. vi., pp. 110, 150, 188.—Ibid., ch. vii.

† See Hamilton Smith, pp. 127, 132, 172, 176, 221, 244, 245, and 381. See also many wonderful analogies in tradition and habits in the most

foundation of sacred history and the earliest events of humanity, are all found imbedded, like the fossils of the earth, in the traditionary legends, both written and oral, of every tribe and people under the whole heavens.*

Now, if mankind have all proceeded from the same original family, and were thus in their primitive stock acquainted with the same primitive revelation and the same Scriptural facts, the preservation of these original traditions with an essential identity, and at the same time with many differences and mythological incrustations, is a fact both natural and to be expected; just as in the exactly analogous case of a *diversity* together with an essential *unity* of languages. But, on the other hand, if mankind is made up of an indefinite number of races, entirely distinct and independent in their origin and subsequent history, then such a unity in the preservation

remote countries and nations, in Pickering on the Races of Men, pp. 281–285, 287; Delafield's Antiquities of America, pp. 32 and 54–64. See also Cuvier, in Edinb. N. Phil. Journal, Jan. 1850, p. 9.

* See Redford's Scripture Verified, lect. i. and ii.; Stillingfleet's Origines Sacra, b. iii., ch. iv. and v.; Gale's Court of the Gentiles, 4 vols. 4to; Bryant's Analysis of Ancient Mythology, 6 vols.; Faber's Origin of Idolatry, 3 vols. 4to, and all his works on archæological subjects; The Worship of the Serpent Traced Throughout the World, attesting the Temptation and Fall of Man by the Instrumentality of a Serpent-Tempter, by the Rev. John B. Deane, F.S.A., &c., Lond., 1833, p. 474; and the Doctrine of the Deluge, by Harcourt, 2 vols.; Faber's Horæ Mosaicæ, vol. i., ch. iii., iv., and v., pp. 41–195; Truth of Christianity Demonstrated from existing Monuments, Sculptures, Coins, and Models, by John Murray, F.S.A., &c. See also Guyot's Earth and Man, pp. 277, 280. "Now, in this respect," says Dr Latham (p. 365), "the phenomenon which has been noticed in Australia reappears in America, viz., a habit or custom, which shall not be found in more than one or two tribes in the neighbourhood of each other, shall appear as if wholly independent of mutual imitation at some other (perhaps some distant) part of the island. Such, in Australia, was the case of similar family names; and such, in America, is the remarkable distribution of the habits of flattening the head and burying on elevated platforms; to say nothing of the two parallel forms of semi-civilization in Mexico and Peru, so concordant on the whole, yet differing in so many details, and evidently separate and independent developments rather than the results of an extension of either one or the other as the original."

of facts and doctrines—which are many of them foreign to all natural suggestions of the human mind, and most peculiar and remarkable in their character,* and yet entirely independent and separate from sacred history—is beyond all possible explanation.

That mankind should agree in any two of these numerous facts, was as improbable as three to one. That they should spontaneously agree in six would be as improbable as seventeen hundred to one; and that they should concur in all, without an original unity of knowledge and of interest, is a supposition absolutely incredible, involving millions of millions of chances against it. It is, in short, impossible. And while, therefore, there may be difficulties in the existing physical condition of men against the doctrine of the unity of the races, there are difficulties millions of times greater in number and in force in the traditional condition of man, against the doctrine of the diversity of the races.

NOTE.

CIVILIZATION THE FIRST CONDITION OF MAN.†

While I thus show that in any state in which we can suppose man to be placed, an acquaintance with animated nature is almost a necessary consequence of the most imperfect advance of civilization, you will not, I trust, suppose me as for one moment lending countenance to that most foolish dream, that man has emerged from a state of barbarism, through the gradual stages of improving civilization, to his present state. It is hard to conceive how such a

* See illustrations in Prichard's Egyptian Mythology, p. 3, Appendix and Preface by Schlegel, p. xxxii., &c.; and p. xix.

As it regards the American Indians, see Wiseman's Lectures, p. 84. On the tradition of Noah and the flood, as found in the fable of Osiris and Menes, see Noland's Egyptian Chronology, p. 389, &c., &c. On the traditions of Joseph, in the account of Hermes, as the reformer of the Calendar, do., p. 402. See also Havernick's Introduction to the Pentateuch, p. 118, &c., sec. 17.

† From "Zoology and Civilization," by Isaac Butt, LL.D., &c.

theory ever became current in a country where men professed to believe the account that is given us in the book of Genesis; almost equally hard to conceive how it ever gained credence among any men, however moderately acquainted with the known facts of the progress of our race, to every one of which it is unequivocally opposed. The fiction of such a gradual progression is no less inconsistent with all that we know of our own nature than it is opposed to all the experience of the world.

I am not now about to bring before you all the arguments by which the truth is, I conceive, incontestably established upon this subject. They will be found admirably and clearly summed up in one of Archbishop Whately's lectures on political economy. There are, however, one or two observations that, even on this occasion, will not be out of place. That man has never emerged, without external aid, from a savage state within the memory of any record of our race, is a fact that might make us at least seriously question his power to do so. That civilization has always, so far as we can trace its earliest progress, extended from civilized to uncivilized nations, might make us ready to believe that it never was the result of any accident that threw into some lucky combination the powers of men, but proceeded from some influence extrinsic to ourselves. That the savage state, wherever it has been found, bears with it traces of being one of degeneracy, never of progress, seems to set the matter at rest; and every indication of our nature, every fact in our history, as human beings, leads us irresistibly to the conclusion, that for the rudiments of civilization, of all that raises us above the inferior animals around us, even in our physical and temporal condition, we are indebted not to any exercise of our natural faculties, but to a direct communication of knowledge from a superior Being. That when man was created, he was not left a savage on earth to the chances of rising, by his own unaided powers, from a state of degradation, from which all experience, indeed all common sense, forces us to believe that he never would have emerged. That the gift of civilization, including in that term the position which enabled him to attain to all the arts that adorn, and all the comforts that soften life, was a direct gift of revelation. That man was created a civilized being, or rather was taught, by direct communication from above, all that qualified him to be one, under the tuition, if I may use the expression, of higher intelligences and powers.

To hold any other view of civilization appears to me, I confess, as infidel as it is absurd—opposed any such view certainly must be to the plain narrative of the Bible. No one reading the first chapter of Genesis can possibly believe that Adam was created and left in the condition of a New Zealander or a Carib of the present day. And to believe that all that we now admire in the wonderful social system of civilized man—all the intellectual, and

moral, and physical grandeur with which that system is now dignified—arose, no matter through what series of progressive improvements—no matter by what long succession of fortunate accidents, each accident a miracle greater than a revelation in itself—by any chance discoveries effected by men like the New Zealanders and the Caribs, is just as wild and monstrous a fiction as that of those who, to escape from the interposition of a living intelligence in the formation of the less wonderful mechanism of the material world, attribute to the chance collection of atoms the glories and the grandeurs of the universe.

That man, once placed in a state of civilization, was capable of improving, is quite true; but it needed the communication of knowledge from above to make him a civilized being. As Newton, after surveying the mechanism of the heavens, perfect in all its parts, and apparently self-sustaining in all its powers, was forced to declare that it needed the impulse of the Almighty arm to give the planets the impulse in the direction of the tangents to their orbits,—just so the philosopher, who examines the most closely the progress of men, will be compelled to acknowledge that even in these matters, which our foolish conceit is fain to call secular knowledge, it needed the impulse of knowledge from above to give us the first tendency toward civilization.

When, or how, or at what interval, or by what communication, this elementary knowledge was conveyed to man, we are not expressly told. Of the hints of such communications which wise men have discovered, or thought they have discovered, in the inspired records—the only authentic account of man's early history—this is not the time to speak. To one remarkable fact, distinctly recorded, I may call your attention. We are plainly told that the science of zoology was the matter of express instruction to the first man. "Out of the ground the Lord God formed every beast of the field and every fowl of the air, and brought them unto Adam to see what he would call them. And whatsoever Adam called every living creature, that was the name thereof. And Adam gave names to all cattle, to the fowl of the air, and to every beast of the field." It is singular that of whatever else may have been thus communicated to our first father, there is no express record. That he was taught agriculture may indeed be reasonably inferred, but this instruction in the names, classes, and forms of the animals over which he was to rule, is the only express account of knowledge divinely conveyed. Many of us have heard, with feelings perhaps akin to irreverence, the light expression that Paradise was the first zoological garden; how few of us have thought of the deep and solemn truth which is spoken even in these careless words!

CHAPTER XVI.

THE UNITY OF THE RACES PROVED FROM EXPERIENCE, FROM KNOWN CHANGES WHICH HAVE OCCURRED AMONG THE DIFFERENT RACES OF MEN, AND FROM THE CHARACTERISTICS OF THE AFRICAN RACES.

Whatever may be their tints, their souls are still the same.—ROBINSON.
One touch of nature makes the whole world kin.—SHAKESPEARE.
There are operations in nature which, to the limited powers of man, are full of mystery; we have, however, before us both the causes and effects—the power of God and the evidence of his works; but we are unable to trace all those links in the great chain which binds the creatures of earth to the throne of Omnipotence.—BACHMAN.

Is there, then, it may be asked, any thing in actual experience, experiment, and observation, to oppose this doctrine of the unity of the human races, which has been thus variously corroborated? Have any of our fellow-men been found incapable of instruction and improvement in a degree commensurate with their previous and long-continued degradation? Have any been found incapable of language, of speech, of song, of music, of poetry, of oratory, of wit, of humour? Have any been found impracticable in the various arts, trades, and manufactures and agricultural employments, or incapacitated for learning and practising them? Has it been found absolutely impossible to impart to any race of men the arts of reading and writing? Or are any wanting in the cunning, artifice, and fraud which characterize fallen man, or in that power of deception which enables man to wear the mask of hypocrisy, and appear religious, upright, and kind, when ungodliness, dishonesty, and perfidious cruelty rankle in the heart? "These," says Dean Miller, "are the same

in every age and climate, since the transgression of our first parents; and the identity of the common stock from which the human race has descended is, perhaps, as clearly evinced by the manifest similarity of the depraved dispositions of the mind, as by the concurrence and agreement of those bodily marks and distinctions which are pointed out by natural historians as essentially constituting particular classes of beings."

Most assuredly no man can hesitate in giving an answer to these inquiries who has been familiar with that African race in whom those in the Southern States of America have most interest. In all these respects they are found, in contrast to the lower animals, capable of instruction, improvement, and useful skill. They can acquire and practise various useful arts.* They can imitate, if they cannot equal, other men in the vices as well as in the virtues of human character. And as regards their present inferiority, circumstances in the social and political condition of many portions of this race in Africa have been pointed out, which are thought sufficient to account for their ignorant and degraded condition.† It is to be remembered, also, that all the inhabitants of Africa are not alike in any one particular, either physical, mental, moral, social, or political. They show differences in complexion, in civilization, and in talent.‡

The characteristics of the most truly negro race are not found in all, nor to the same degree in many. "The exterior of the negro race," says Blumenbach,§ "gradually approaches to that of other races, and acquires by degrees their fine faces." An actual transformation of races is seen in many of the African nations, as in the Berbers, the Abyssinians, the Gallas, the Samaules, the Soudan, the Caffre, and

* See a full exhibition of the facts relating to these attainments in art, in Lawrence's Lect., pp. 337–340, and Blumenbach.

† See Encycl. Brit., art. Negro.

‡ Dr Wiseman, pp. 135–139; and Encycl. Brit., vol. xvii., p. 78; and Lawrence's Lect., pp. 385–387, 232, 239, and 336–340.

§ Transactions of Roy. Soc., Lond. 1836, pp. 512–515, and Martin's Nat. Hist. of Man, p. 281.

several other kingdoms.* The Nubians to the West of the Nile are a gentle kind of negroes, having flat noses and woolly hair. The Abyssinians discover some traits of the negro mixed with the Arab blood, and are therefore called *habash* or mixed people by the Mahomedans. The Caffres are a negro and Arab race. The Hottentots, though hemmed in from all conceivable mixture, are nevertheless a mongrel race. The Gallas have more negro and less Arab blood than the Abyssinians. The Samaules, whose territories were known to the ancients, are also a mixed race. The Soudan population has been converted from a negro into a mixed race.† And indeed a great portion of the African tribes are of this mingled character, and some of them have adopted the Mahometan faith. Such also is the population of the South Sea Islands, in which, and sometimes in the same island, there exists an evident diversity of shades, the black or negro, and the white races.

Clapperton, and other travellers among the negro tribes of interior Africa, attest the superiority of the pure negroes above the mixed races around them in all moral characteristics, and describe also large and populous kingdoms, with numerous towns, well-cultivated fields, and various manufactures, such as weaving, dyeing, tanning, working in iron and other metals, and in pottery.‡ The Paris correspondent of the New York Journal of Commerce says :—"At a meeting of the Academy of Sciences, we heard nothing of particular interest, except a report from a very able committee, on the *negro* race of Eastern Africa, South of the Equator, as closely and long observed by M. Froberville, a scientific traveller. He has brought with him sixty casts (busts) of types of the three divisions of the negroes. The committee decide that the results of his researches serve materially to prove the identity and common local origin of

* Guyot, Earth and Man, p. 237. Brit. Encycl., vol. ii., art. Africa.
† Brit. Encycl., vol. ii., pp. 225, 226, 231, 232, 233, 237.
‡ Ibid., pp. 237, 238.

the whole human species. There are various affinities of conformation between the blacks of Eastern Africa."

All the negro races also believe in the first principles of natural religion, in one universally powerful Being, in prayers and worship, in rites and sacrifices, in priests and ministers, in the immortality of the soul, in a future state of rewards and punishments, in the division of time into weeks; and they have given as ready a reception as any other people to religions, both true and false, to idolatry, Mahometanism and Christianity.*

And as it regards languages, an analysis of the Mpongwee, which prevails over a large extent of Western Africa, has shown it to possess a marvellous development and perfection of structure.†

Speaking of the Ghas on the Cape coast, Dr Latham observes:—"More important still is the unequivocal occurrence of numerous well-marked Jewish characters in their religious and other ceremonies. A paper of Mr Hanson's on this subject leaves no doubt of the fact. The interpretation, however, is more uncertain. The present writer believes that such phenomena, *i.e.*, points of similarity with the Semitic nations, is the rule rather than the exception with the African tribes, negro and non-negro,—a fact which makes the Jews, Arabs, and Syrians, African, rather than the Africans Semitic." ‡

"Again, the extent to which the Falashas exhibit a variety of customs common to themselves and the Jews has been long recognised. It by no means, however, follows that they are a result of Jewish influence. The criticism that applied to the Ghas applies here. Many of the so-called Jewish

* See Dr Prichard's Researches, vol. ii., p. 216. They preserve among them a sacred reverence for the serpent. See pp. 205, 207.

† See an article by the Rev. John Leighton Wilson in the Bibliotheca Sacra, and in the Journal of the American Ethnological Society, and also Bartlett's Progress of Ethnology, pp. 34, 35. See also the Dissertations on the Knowledge of America by the Ancients in the Ethnological Journal, Nos. iii., iv., &c., and Pickering on the Races, p. 176.

‡ Latham, p. 477.

peculiarities are African as well, irrespective of intercourse and independent of imitation." "The real affinities of the Egyptian language," adds Dr Latham, "are those which its geographical situation indicates, viz., with the Berber, Nubian, and Galla tongues, and through them with the African languages altogether, negro and non-negro." "Again the fact," says Dr Latham, "that both the Galla and Agou languages pass through the Amharic into the more typical Semitic tongues, and that the former (over and above many undeniable points of affinity with the Coptic) is quite as sub-Semitic as the Berber, is one of the many phenomena which break down the broad line of demarcation that is so often drawn between the Semitic and the African nations."*

Perhaps there is no race in the world which, if subjected to the same hapless condition as the African for the same length of time, would not be found equally degraded. A long succession of ages under such influences would stereotype hereditary dulness and stupidity, and render the most enlightened people obtuse. Of this even Lord Kames gives striking examples,† to which may be added the cases of the Dutch in S. Africa, the Hispanio-American at Paraguay, the Lusitanio-American in Brazil, and the English in N. S. Wales.‡ We may again also refer to the contrasted character of the inhabitants of England and Ireland. In the fifth century, Ireland was the source of literature, philosophy, and learning to England, to Scotland, and to Europe. Of the inhabitants of Great Britain, Mr Martineau of Liverpool says:—"Taken one by one, even now, they present only harmonious varieties of a single type; and the fact that the Scottish people are of the very same race, yet differ from the Irish more widely than ourselves, is enough to show that the imaginary difficulties of lineage are pliant under the discip-

* Latham, pp. 500, 510, 469.

† See Smith's Essay on the Variety of Complexions in the Human Species, pp. 47, 48. 2d Am. ed.

‡ See Delafield's Antiquities of America, pp. 120, 123.

line of events. Yet though made by birth of the same blood, set by nature within the same latitudes, led by conversion to the same religion, we have been brought by social agencies into a contrast of condition, to which the world presents no ancient or modern parallel. You might travel from Siberia to Normandy, and scarcely find such extremes to compare as Tipperary and Middlesex. If a shapeless cabin were cut out of the Galtee hills, and set down in the court of the London Exchange, it would be too true a type of the human differences which have been permitted to separate these provinces. Europe presents no poverty lodged in such holes, fed with such meals, clothed in such rags, cheerful under such hopeless privations, as you find in the one; no wealth so solid, no comfort so established and diffused, no habits of order so fixed, no provision for the future so anxious and abundant, as in the other. England is known over the world as the extreme of opulent civilization; Ireland as the outcast of hungry wretchedness. Along the great rivers of every continent, on the bays of every productive coast, in the isles of every rich archipelago, British factories rise, and bills of exchange speak for us a few telling words; on the same spot appears a slouching figure, with a stick and bundle, and careless speech, never far from a blessing or a curse, whose aspect publishes our shame. The genius of his country is like a mocking spirit to ours. Full of the wild fire of life, rich in the unwrought elements of humanity, quick to passion, mellow in affection, deep in humour, he flies over the earth, to track the sedate and well-dressed genius of England, and spread out the shadow of mendicancy in the train of its sumptuous advance. 'Ha! ha!' says the laughing spirit, 'go where you will, you old impostor, and I'll be with you, and sit at your door, and men shall look on me and on you; for the face of us two can tell no lies.' And so on along the St Lawrence and the Mississippi, on the railways of France and Germany, it is published, that England, with unrivalled resources, with indomitable

perseverance, with faculties for governing unsurpassed even by ancient Rome, with a people abhorrent of oppression and detesting slavery, with a constitution practically free, and a religion singularly earnest, cannot, with centuries at its command, organize the barbaric elements it rules, and reduce the beggary of a nation at its gates." The degradation of the African and other similar races is not, therefore, an anomalous fact, even in the history of races of men capable of the highest civilization, and in their condition and circumstances it was unavoidable; while many indisputable examples of at least comparative taste, talent, genius, erudition, and military prowess, in this very race, either in the bud or in the fruit, are sufficient to prove, in the language of a quaint writer, that "the negro, like the white man, is still God's image, though carved in ebony."*

Dr Bachman has a chapter in illustration of the fact of "the improvements in the skull and physical developments of the African race." "Our experience," he says, "has produced a conviction that the African race is capable of making considerable advance. Whilst we are free to admit that the negroes cannot, either in our country or in any other, be transformed without amalgamation into a white race, we do not, however, accord with the views of those who represent them as having undergone no change either in form or skull since their introduction into our country. We have for many years had passing before our eyes innumerable evidences to convince us that this is not the fact. Whilst we perceive no change either in colour or hair, we are fully satisfied that even in the maritime country of Carolina there is, in form, in feature, and especially in skull, a very striking departure from

* Blumenbach collected a library of works written by negroes.

See also Dr Good's Book of Nat., vol. ii., p. 99; and on pp. 98–100, he mentions some of the cases referred to.

Chambers of Edinburgh has published a Tract containing illustrations of the same fact. Sharp also published an 8vo vol. on the Intellectual Powers of Negroes. See also Dr C. C. Jones of Georgia on the Instruction of Negroes.

the original type. We still have some hundreds of native Africans remaining in South Carolina, some of whom present the tatoo received in Africa. They belonged to tribes that were the progenitors of our negroes. They present, in their thick lips, the curvature of the leg, the projection of the heel, the narrowness of the forehead, which is generally wrinkled, and in the thickness of the lower jaw, such striking peculiarities when compared with our native negroes of unmixed blood that have been born in this country, and are but three or four generations removed from their African forefathers, that we have for many years past been in the habit of detecting their origin at a glance. We may, however, state one fact without the fear of contradiction. If the cast of the skull of an African, from the rich collection of skulls in the cabinet of Prof. Morton, and labelled, 'Negro, of whose history nothing is known,' and which is staring us in the face while we are penning these lines, is the true African type, then our negro race in the South has unquestionably presented a most remarkable improvement in the skull. We do not doubt that this cast is an exact copy of the original,—it also bears a characteristic resemblance to the figure of the skull of a negro in Lawrence.* We have, however, compared this cast with more than fifty skulls of native-born negroes, and in all but one, which resembled it very closely, and with whose origin we are unacquainted, there were most marked differences, and very wide departures."

In another chapter, after giving an examination of the measurements of the brain, made by Dr Morton, Dr Tiedemann, and himself, Dr Bachman says:—"Thus the negro skull was less than the European, but within one inch as large as those of the Persians, Armenians, and Caucasians, and three square inches larger than two branches of the Caucasian race, the Indostanic and Nilotic. These tables, which we have presented in the figures of Professors Tiedemann and Morton, will satisfy us of the futility of any attempt to divide the races of

* Nat. History, pl. 6.

men into different species from the size of the brain. There were nine cubic inches' difference, in the average measurement, between the skulls of the English and Irish, and only four inches between the mean of sixty-two African skulls and six native Irish. The largest African skull was ninety-nine, and the largest Irish only ninety-seven. This proves that a negro skull contained more brains than that of the largest Irishman, but it does not hence follow that he possessed more sense. The former had probably a larger frame than the latter. . . . There appears to have been a constant change going on in the crania as well as in the character of many nations. If we select the extreme types of any of the races, we will see a wide difference; but if we look among individual forms, we will, in many instances, find it difficult to determine to which race they belong. Among many skulls of negroes and Europeans, which are now before us, we find some where the two races approach each other so nearly, that it requires much attention and a practised eye to distinguish between them; and were we to give the white colour and straight hair of the Caucasian to some of the skulls of the negro, the most practised anatomist and physiologist might be easily deceived."

"Indeed," to use the words of Agassiz, "the facilities, or sometimes we might rather say necessities, arising from the varied supplies of animal and vegetable food in the several regions, might be expected to involve, with his corresponding customs and modes of life, a difference in the physical constitution of man, which would contribute to augment any primeval differences. It could not indeed be expected, that a people constantly subjected to cold, like the people of the north, and living almost exclusively on fish, which they cannot obtain without toil and peril, should present the same characteristics, either bodily or mental, as those who idly regale on the spontaneous bounties of tropical vegetation."*

It was at one time supposed that the anatomical investiga-

* Zoology, pp. 180, 181.

tions of Fleuren had resulted in proving, from the marked and permanent differences in the cuticle existing under the integument of the white man and negro, that they were composed of different species. At a subsequent period, however, these structures in the tegumentary organs were investigated by the aid of the microscope, by Heule, Schwann, Purkinje, Simon, and several other professors of anatomy and physiology in Germany. "At the period of our visit to Berlin," says Dr Bachman, "Dr Heule and others were actively engaged in these investigations. These researches led them to the conviction that the cells containing the black pigment under the skin of the African negro, resembled very closely a structure containing dark colouring matter in the diseased or dead bodies of white men. They also discovered that freckles, red blotches, &c., on the skin of white persons, had their several origins in the pigment cells which gave these peculiar discolourations to the skin. As far as these investigations have been referred to in any of the scientific works published in Germany, that have come to our knowledge for the last ten years, there appears to be a unanimous conviction, that the organical differences between the skin of the negro and the white man, or any of the races, were utterly insufficient to afford even an argument in favour of a plurality in species." "Microscopic anatomy has recently very satisfactorily proved that the colour of the skin exists in the epidermis only, and that it is the result of the admixture of pigment cells with the ordinary epidermic cells. The office of these pigment cells appears to be the withdrawing from the blood, and elaborating in their own cavities, colouring matters of various shades; and all the different hues which are exhibited by the eleven races of man depend on the relative quantity of those cells, and the colour of the pigment deposited in them. The 'rete mucosum,' which was once described as a separate colouring layer underneath the epidemis, is simply the new soft layer of epidermis. If we examine the skin of the negro anatomically, we shall find

no structure peculiar to it, for the very same dark cells are found in the fairest of mankind. It would, however, appear, at the first glance, that the black and white races of men—the fair Saxon, the black African, the olive Mongolian, and the 'red man' of North America—are positively separated from each other, and that this peculiar colour of the skin, transmitted as it has been from father to son, generation after generation, ought to be accepted as an undoubted specific distinction; but it has been well suggested by an able reviewer of Dr Prichard's book, that a more extended survey tends to break down any such distinction; 'for on tracing this character through the entire family of man, we find the isolated specimens just noticed to be connected by such a series of links, and the transition from the one to the other to be so very gradual, that it is impossible to say where the line should be drawn. There is nothing which at all approaches to the fixed and definite characters which the zoologist admits as specific distinctions amongst other tribes of animals. On the other hand, we find such a constant relation between climate and the colour of the skin, that it is impossible not to perceive the connection between them.' The parts of the globe included between the tropics, or closely bordering upon them, form the exclusive seat of the native black races, whilst the colder temperate regions are the residence of the fair races, and the intermediate countries are inhabited by people of an intermediate complexion. Some members of the Jewish nation, scattered throughout the colder regions of Europe, where they have been acclimatized during a sojourn of many hundred years, have assumed, in some degree, the lighter tints of complexion, and the yellow, red, and brown hair of the people inhabiting the same country with them. This last fact has been thought, both by Dr Prichard and others, to be one of great importance, as proving the influence of climate, continued through a long series of years, on the colour of the skin, the more so because it is well known that, from national and religious prejudices,

the Jews are altogether separated from the people among whom they are living. The hue of the skin varies, in the dark-coloured races, from a deep black, which is the hue in some African nations, to a much lighter, or, as Dr Prichard terms it, a more 'dilute shade,' that is, the colouring pigment is of a lighter colour. The dusky hue is combined in some nations with a mixture of red, in others with a tinge of yellow. The former are the copper-coloured nations of America and Africa; the latter, the olive-coloured races of Asia. In the deepness or intensity of colour we find every shade of gradation, from the black of the Senegal negro, or the deep olive and almost jet-black of the Malabars, and some other nations of India, to the light olive of the northern Hindoos. From that, every variety of hue may be traced, among the Persians and other Asiatics, to the complexion of the swarthy Spaniards or of the black-haired Europeans in general. On the other hand, Dr Prichard has shown that there are instances in which fair races have become dark without any considerable change in external conditions. We find the Germanic nations, which were unanimously described by ancient authors as very fair, possessing red or yellow hair, and blue or grey eyes, have become much darker since that time, so that these peculiarities are far from being common amongst them, and must now be rather looked for in Sweden. That an amelioration of the climate of central Europe has taken place during the same period cannot be doubted, but the climatic change scarcely seems decided enough to account for such an alteration in the physical characters of the population. Explain the fact as we may, it is an evidence of the variability of the races of men, since it is altogether impossible to question the purity of the descent of the Germanic nations, or that the change of complexion has resulted from any admixture of a foreign element. With regard to the hair, it may be shown by microscopic examination that the hair of the negro is not really wool, and that it differs in its intimate structure from

that of the fairer races only in the greater quantity of pigmentary matter which it contains in its interior; and the same may be said of the jet-black hair so often seen in England. The crisp, twisted growth of the negro hair is the only character by which it can be separated from the straight, and this cannot for a moment be relied on as a proof of original difference, since these national variations do not exceed those which present themselves within the limits of any one race, and we daily meet Europeans with hair quite as black and woolly as that of the negro; and if we examine the tribes in Africa, every possible gradation is found, from the so-called woolly hair to simply curled or even flowing hair. The fact of red hair occurring amongst the negroes of Congo has been alluded to by Blumenbach, who saw many mulattoes with red hair. Dr Prichard observes that even if the hair of the negro were really analogous to wool, which it is not, 'it would by no means prove him to be of a peculiar and separate stock, unless the peculiarity were constantly presented by all the nations of negro descent, and were restricted to them alone, for there are breeds of domesticated animals which have wool, whilst others of the same species, under different climatic influences, are covered with hair.' Two other popular distinctions between hair and wool may be drawn from the fact that wool falls off altogether in a mass and leaves the animal bare, while hair falls off singly, and from time to time. The growing part of the fibre of wool varies in thickness according to the season, being thicker in proportion to the warmth of the atmosphere, and smallest of all in winter; on the contrary, the filament of hair is generally of uniform thickness, or tapering a little towards a point. The peculiarities observed in the structure of the bony skeleton, more particularly of the cranium and pelvis, next claim attention; for these have been thought to furnish more important guides for the separation of the races of men into distinct species than either the colour of the skin or the texture of the hair. Since the works of Camper and

Blumenbach appeared, repeated efforts have been made to arrange the different members of the human family into distinct species, the conformation of the skull being the guiding characteristic. To select a Negro, an European, an American, or a Malay skull, when strongly-marked peculiarities were presented, would probably be no very difficult task; but are these types common to the entire races they are said to represent? Have they that permanency and invariability which is requisite to found a specific distinction? And the facts which have been accumulated in answer to these inquiries prove, 1st, That these peculiarities are far from constant in the several nations of one race, or even in the several individuals of one nation; and, 2d, That external conditions being improved, they are liable to undergo alterations,—changes which every influence that exalts the general habits of life, and calls into exercise the faculties of the mind, has no considerable influence in producing."*

"What there was or now exists in the climate of intertropical Africa to give to the inhabitants, in the different localities of those regions, such great diversity in the shape of the head, the expression of countenance, and structure of hair, is just as difficult for us to conceive, as for our opponents to explain why, in the same country, the hog has become black, the sheep has lost its wool and put on a covering of black hair, and the dog, as well as some breeds of pigs, have become naked, or why it is that a variety of the common fowl (Gallus morio) is not only black in colour, but has the comb, wattles, and skin dark purple, and the periosteum of the bones black. When these phenomena in the lower order of animals shall have been fully accounted for by our opponents, they will have afforded us some lights by which we will be enabled to explain the causes of difference in human forms and complexions."

Dr Prichard, Mr Pickering, and Hamilton Smith, are of opinion that the African was the primitive form and race of

* From Dr Hall's Introd. to Pickering on the Races, pp. 44–51.

man, and that all the others are divergences from this earliest type; while Dr Bachman thinks the probability in favour of the supposition that the primitive form and colour was intermediate between the African and white races, and that these are therefore variations equally removed from the original.*

But it is asked, why do we not see changes from black to white races actually arising at the present time? The races, says Dr Bachman, are already established, and, as far as experience in other departments of the animal creation affords us light on these subjects, varieties once formed may produce other varieties, or they may sink into degeneracy and perish, but they cannot again be brought back to the races from which they originated. No breeds of cows, horses, swine, or birds, have ever reverted back to the original forms; we can scarcely doubt that this phenomenon will be the same in the races of men. New countries and climates may produce varieties among them, but their progeny, even though they be removed to the homes of their predecessors, never revert back to the original variety. Like streams that flow onwards, like fragments of rocks broken from precipices, like metals changed by the chemist's art, they exist in other forms, they enter into other combinations, but never return to their original sources. If this answer is not satisfactory to our opponents, we would ask them in return, can you, without an amalgamation, convert the Shetland pony, the Carolina tackey, or the dray horse, into the form of the wild Tartarian horse by any mode of feeding, training, or emigration? Can you bring back the Durham cow to the Bos taurus?—the merino or the large-tailed sheep to the Ovis aries?—the Carolina hog to the wild boar?—the large Bremen goose to the original lag goose?—the Aylesbury or the East India duck to the original Anas boschas?—the powter or the fan-tailed pigeon to the original rock-dove?—the golden pippin

* See Prichard's reasons, given Lond. Quarterly Review, Jan. 1850, p. 19; Pickering on the Races, p. 305, for his reasons; Hamilton Smith, as quoted; and Dr Bachman, pp. 155, 156, &c.

to the wild English crab?—the sickel pear to the wild iron pear?—or the cauliflower to the wild brassica, in ten thousand years? Permanent varieties put on the characteristics and tenacity of species. We perceive, then, that there are operations in nature which are constantly going on before our eyes, at which man may cavil, but for which no process of reasoning can enable him to assign a satisfactory cause; whilst we are groping in the dark, her laws are still uniform, and operate in the same unvaried manner, from the humblest plant and the minutest insect up to reasoning man, the highest order in our world.

But there is another answer to this inquiry, and that is found in the fact that in the primitive age of the world, geological and climatal conditions conspired with the adaptation of man's constitution to produce great changes, and to originate and perpetuate such modifications.

It was an ancient opinion that man is a microcosmus, an abstract or model of the world. "This much," says Lord Bacon, "is evidently true, that of all substances which nature has produced, man's body is the most extremely compounded: for we see herbs and plants are nourished by earth and water; beasts for the most part by herbs and fruits; man by the flesh of beasts, birds, fishes, herbs, grains, fruits, water, and the manifold alterations, dressings, and preparations of the several bodies before they come to be his food and aliment. Add hereunto, that beasts have a more simple order of life, and less change of affections to work upon their bodies: whereas man in his mansion, sleep, exercise, and passions, hath infinite variations; and it cannot be denied but that the body of man, of all other things, is of the most compounded mass."

To pronounce on the physical powers of the antediluvians and postdiluvians by a reference to our own short-lived existence, and from our present laws and condition of the earth, would be as wise as to argue from the existing facts of the material world, with its manifold incrustations and

decompositions, to a strictly analogous state of things in all past ages.*

Hamilton Smith gives numerous facts at great length to show that there are evidences "of a great atmospheric change in relation to man after a diluvian cataclysis," by which regions once adapted to the negro stock were adapted to different races.† He shows, therefore, the former greater mildness at the north pole, and the narrowness of Behring's Straits. In illustration of this, the conclusion of Professor Edward Forbes, already alluded to, respecting the origin and diffusion of the British flora, may be cited, from his Survey Memoir on the Connection between the Distribution of the existing Fauna and Flora of the British Islands, &c., p. 65. "1. The flora and fauna, terrestrial and marine, of the British islands and seas, have originated, so far as that area is concerned, since the meiocene epoch. 2. The assemblages of animals and plants composing that fauna and flora did not appear in the area they now inhabit simultaneously, but at several distinct points in time. 3. Both the fauna and flora of the British islands and seas are composed partly of species which, either permanently or for a time, appeared in that area before the glacial epoch; partly of such as inhabited it during that epoch; and in great part of those which did not appear there until afterwards, and whose appearance on the earth was coeval with the elevation of the bed of the glacial sea, and the consequent climatal changes. 4. The greater part of the terrestrial animals and following plants now inhabiting the British islands are members of specific centres beyond their area, and have migrated to it over continuous land, before, during, or after the glacial epoch. The Alpine floras of Europe and Asja, so far as they are identical with the flora of the Arctic and sur-Arctic zones of the Old World, are fragments of a flora which was diffused from the North, either by means of transport not now in action in the tempe-

* See Hamilton Smith, pp. 217, 218, and 265.

† See also Dr Bachman, p. 302.

rate coasts of Europe, or over continuous land which no longer exists."*

There is, therefore, nothing, as Dr Bachman says,† unreasonable or unscientific in the supposition that the constitutions of men were so organized, that in those early times, before the races had become permanent, they were more susceptible of producing varieties than at a later period, after their constitution had attained to the full measure of its development, beyond which there would at every step be a greater difficulty either in advancing or returning.‡

There is one other objection which may be noticed under this chapter, founded upon the case of the Dokos, the Bushmen, and other tribes who are alleged to be without language and the other essential characteristics of man.

Now, in reply to this objection, we remark, in the *first* place, that the whole of our present knowledge of the Dokos is founded upon the most imperfect evidence.§ *Secondly*, we remark, that even if the Dokos or any other tribe could be shown to be destitute of the attributes of humanity, this would only prove, either that they were not human beings, or that they had sunk to a condition of barbarism lower than that of any other race, but it would in no degree affect our general argument.

But *thirdly*, we remark, that in the case of the Bushmen, full experiment and observation have proved that men may descend to such a depth of degradation as to appear beyond the pale of humanity, while originally of the same race with more civilized tribes. This will appear from the following facts respecting the Bushmen given by Dr Prichard in his last publication.‖ It has been supposed that the Bushmen

* See in Humboldt's Cosmos, p. 363, vol. i.; see also Lond. Quarterly Review, Jan. 1850, p. 18, col. 1, American edition.

† Bachman, p. 202.

‡ On this argument, see the Ethnological Journal, No. iii., pp. 147, 148. Macculloch's Proofs of the Attributes of God, vol. iii., pp. 480, 481.

§ See Dr Prichard's Nat. History, Appendix, 3d edit.

‖ Ibid, pp. 593-604.

are a race of men distinct from the Hottentots. This opinion was founded on the difference of their manners; on the supposed untamable character of the Bushmen; and, most of all, on the fact, that the Hottentots do not understand the language of the Bushmen. Others, who suppose the two nations to be of one stock, imagine that the hordes of Bushmen owe their existence to the hardships which were inflicted by the European colonists of South Africa on the Hottentots. The herdsmen of that race are supposed to have been plundered by the Dutch settlers near the Cape; and, after losing their cattle and all their property, to have been driven into the wilderness, to subsist on such food as they could acquire by the chase, and the rude arts of the most abject savages. Neither of these opinions is well founded, as it has been fully proved by the researches of an able and well-informed traveller, who has made a long abode in South Africa, and was engaged by the colonial government to undertake a long journey of investigation in the interior of Hottentot-land and Kaffiristan. From Dr Andrew Smith's accurate information, we are convinced that the Bushmen are of the same race as the Hottentots, and originally spoke the same language. They have been separated, however, from the pastoral Hottentot from a very distant period, and do not owe their destitute condition to the robberies inflicted on their forefathers by European colonists, though their numbers have been augmented from time to time by the resort of outcasts from various conquered and reduced tribes to the wandering hordes in their vicinity.*

"I have been assured by Dr Andrew Smith, who has not yet given to the world a full account of the results of his extensive observations on South Africa, that almost every tribe of people who have submitted themselves to social laws, recognise the rights of property and reciprocal social duties, and have thereby acquired some wealth and have formed themselves into a respectable caste, are surrounded by hordes

* Prichard, pp. 593, 594.

of vagabonds and outcasts from their own community, or have them in their own vicinity: that these hordes are ever gathering accessions from the predatory parties of neighbouring tribes, or even of more distant bodies of people. Their haunts are in the wilderness and in the fastnesses of mountains and forests, and become the resort of all who, from crimes and destitution, are obliged to retire themselves from the abodes of the more industrious and honest and thriving of the community. Such are the Bushmen of the Hottentot race. But a similar condition in society produces similar results in regard to other races; and the Caffres have their Bushmen as well as the Hottentots. But the people known to the Cape colonists, are merely the outcast Hottentots. There are likewise vagabonds belonging to the Bechuana nation, who are called by the latter people Balalas. The wild outcasts who are scattered over the Kalâhaîe Desert, are known by the title of Bahalahaîe. These, like the Balala, consist of the paupers and outcasts from different nations and the neighbourhood. 'They all stand,' as Dr A. Smith assures me, 'in the same relation to the Caffres as the Bushmen to the Hottentots.'"*

The fact of a tribe of people in a better condition, and looking upon themselves as of higher caste and dignity, having in its vicinity hordes of a lower state, a sort of malechehás, or a "mixed multitude," descended probably from refugees and outcasts, and more or less mingled with foreigners and vagabonds from various quarters, is a thing likely to have occurred in other parts of the world besides South Africa; and the supposition of its existence may tend to explain many phenomena in history or ethnology. In India, for example, it cannot be doubted that many a tribe of obscure origin, living beyond the limits, or on the outskirts of civilized communities, owes its existence, in a great part at least, to the shelter which woods and fastnesses and mountainous tracts afford, from time to time, to persons whose character and habits of life are

* Prichard, pp. 595, 596.

such as to unfit them for the observation of laws, and for submission to regal and priestly ordinances. Many writers on Indian history have attributed this origin to the Bhils and Goands, and other tribes of the mountains, who display but slight differences in physical character and language from the people of the plains.*

The language of the Bushmen is merely a dialect of the Hottentot idiom, spoken by all of that race. This is the decided testimony of all late travellers, though the differences of words collected in vocabularies are so great as to have given rise at one period to a different opinion. The people of some hordes speak much like the Namaaquas; others use the same words with different pronunciation; a third party, as we are assured by Dr Andrew Smith, vary their speech designedly, by affecting a singular mode of utterance, and adopt new words with the intent of rendering their ideas unintelligible to all but the members of their own community. For this last custom a peculiar name exists, which is—"cuze cat." This is considered as greatly advantageous to the tribe in assisting concealment of their exploits and designs. The modified dialect is more or less understood by the population belonging to each Bushman tribe, but not to the Hottentots, or those who know only the common language of the race. The clapping noise occasioned by the various motions of the tongue, which is characteristic of the Hottentot language, is particularly of frequent occurrence among the Bushmen, who often use it so incessantly as to make it appear that they give utterance to a jargon consisting of an uninterrupted succession of claps. The dialects of the Bushmen thus modified are not generally intelligible to the Hottentots, though it is observed, on the other hand, that such Bushmen as live on friendly terms with the Hottentots in their neighbourhood, and associate with them, acquire such a modification of utterance that their language is perfectly understood. The fact that a savage nation is thus known to modify its speech pur-

* Prichard, p. 593.

posely, for the sake of becoming unintelligible to its neighbours, is by no means unimportant in regard to the history of languages. It is impossible to say how many of the apparently original diversities of human speech may have derived their commencement from a similar cause, and from the voluntary adoption of a new jargon by some small separate community. The clapping articulation of the Hottentots may have originated wholly from this habit.

The present abodes of the Bushmen are scattered through the whole of the extensive plains lying between the northern boundary of the colony, the Kamiesberg range of mountains, and the Orange river. In former times they were more widely spread, and are said to have occupied many districts within the boundaries of the colony; as the barren districts between the Olifaut and Groene rivers and the great Karoo, as well as the country on the Camptoes river. The population is thinly spread, especially at particular seasons of the year, or when the supply of game is scanty. In situations where nature is liberal of productions readily applicable to the support of life, small communities exist; where food is scanty and defective, it is rare to find more than one or two families in the same place. Little intercourse exists between them except when self-defence, or an occasional combination in some marauding expedition undertaken in the hope of booty, brings them into contact; and some mischief is apprehended by the colonists when it is known that many Bushmen have formed their kraals in the same neighbourhood.

They are constantly roving about from one place to another, in quest of a precarious subsistence. Hence they bestow but little labour on their temporary dwellings. They erect a shelter of bushes for the night, or rest under mats suspended on poles; or dig holes in the ground, into which they creep. Their clothing is principally a kaross or loose mantle of sheepskin, which is a garment by day and a covering by night. They carefully besmear their skin with fat, as a protection against the parching effect of the heat and wind, and, like

other savages, they are fond of ornamenting their hair, and ears, and bodies, with beads and buttons, shells and teeth, and other barbaric decorations.

In physical characters, the Bushmen differ little from the Hottentots in general. Dr Andrew Smith declares that they are certainly not inferior in stature to the other Hottentots. Among the latter, there are individuals of every growth ; and those travellers who have given us the most striking descriptions of the Bushmen, were probably less acquainted than this intelligent writer with the other Hottentot tribes. We are told by Mr Leslie, who has described the Bushmen of the Orange river, that, small in stature as the Hottentot race is, they are in that quarter less than elsewhere. He adds that they seldom exceed five feet. This, however, indicates no great difference, or at least not more than may well be attributed to scanty sustenance, beginning from childhood, and continuing through many generations.

We are assured by Mr Bunbury, who had better opportunities than most travellers for observation, that the Hottentots are a very diminutive race. He declares that the majority of those in the Cape corps, at least of the new levies, are under five feet in height, and by no means strong.

Their hands and feet are small and delicate, in which particular they differ remarkably *from the negroes.**

"Although the wild tribes of the Hottentot race display ferocity, and all the other vices of savage life, yet we have abundant proof that these people are not insusceptible of the blessings of civilization and Christianity. No uncultivated people appear to have received the instructions of the Moravian missionaries more readily than the Hottentots, or to have been more fully reclaimed and Christianized. In one of my former works, I have taken pains to collect the most authentic accounts of their change of condition, and to compare it with that of other nations, who in later times have received the blessings of conversion to the Christian religion." †

* Prichard, pp. 600, 602. † Ibid, pp. 603, 604.

We may further illustrate the hasty ignorance with which conclusions are drawn adverse to the truth of Scripture, by a reference to a race of strange people in the interior of Ceylon, known by the name of Veddahs, or "wild men of the jungle."

These savage foresters, when discovered, had no houses or villages. When the season was dry, they roamed in the woods, and slept under the trees, and even on high among the branches; but in the wet season they crept into caves, or lay under the shelter of rocks. Their beds were a few leaves, and they had nothing more on them than their neighbours the beasts, except a small piece of cloth around the waist, and a few arrows.

These poor creatures never cultivated the ground for food, but lived upon roots and wild honey, though sometimes they fed on lizards, monkeys, and other animals they found in the forest. They looked very wild; their hair was loose, rugged, and burnt brown by the rays of the sun.

A traveller once met with an old Veddah, and asked him to bring his family that he might see them. The Veddah said they would not come, for they had never seen a white man: they would sooner meet a savage beast than see one. But after the promise of a gift, he went to seek for them. In a little time loud shrieks were heard: the wild man was forcing his wife and children along, and they were crying out with terror. When they came nigh and saw the traveller, they again cried aloud and rushed into the thicket. After a long time, the man contrived to bring his wife, daughter, and little son to the spot; and when the gentleman held out his hand to the boy, he was so terrified that he ran, shrieking, into the jungle with the swiftness of a deer.

The father was asked where he slept. "On the trees," he replied. "But where do your wife and children sleep?" "On the trees." "But how can they climb?" "It is their nature." "What do you eat?" "Such things as we can get." "What religion are you?" "We do not know what you mean." "Where do people go after death?" "We do not know."

These wild men had no knowledge of God. If they had any religion, it consisted of worship offered to the devil. When any one of their number fell ill, they made a "devil-dance," and offered cocoa-nuts and rice to the wicked spirit who they suppose afflicts them. They had no knowledge of hours, nor names for days; indeed, they were sunk in the lowest state of ignorance and misery.

These wild men of the jungle, however, are immortal beings, and have souls to be saved or lost. They are sinners, and need a Saviour. And has any thing been done for them? Yes, missionaries have already been among them, and God has blessed their labours to these poor creatures. They have been taught to build houses, and plant rice; to clothe their bodies, and live like human beings. The school-house has been built; the Sabbath is kept holy; many have been baptized, and now meet for prayer and to praise God; and there is reason to hope that a good number have found peace with God, through faith in our Lord Jesus Christ.*

Christianity, the religion of God, who is the Father of all, and of all the nations of earth, whom he has made of one blood, is therefore the infallible test and "experiment," as the apostle expresses it, of the common humanity of all men.

NOTE A.

THE SKULL OF THE NEGRO.

The African races, we have shown, are not incapable of improvement from any want of physical development. There is nothing in their brain or in any other organ of the mind which renders such advancement impossible. "It has been proved," to quote from Dr Hall, "by Mr Owen and by Dr Prichard, that when the skulls of adult apes are compared with those of man, the most strongly marked and important features distinguish the quadrumanous type from that of the human skull. The cranium,

* Religious Tract Society, 56 Paternoster Row (122); and Prichard, p. 251. See also Note B, p. 270.

a small rounded case, is posterior to, and not above the face; antero-posterior diameter of the basis of the skull is much longer than in man, but the situation of the zygomatic arch in the plane of the base of the skull, presents the differences in the most striking manner. In all the races of men and even in human idiots, the entire zygoma is included in the anterior half of the basis of the skull; in the head of the adult chimpanzee, and also in the ourang, the zygoma is placed in the middle region of the skull, and in the basis occupies just one third part of the entire length of its diameter." "The situation of the great occipital foramen furnishes," says Mr Hall, "yet another most distinguishing feature. In the human head it is very near the middle of the basis of the skull, or rather, speaking anatomically, it is situated immediately behind the middle transverse diameter; while in the full-grown chimpanzee, it occupies the middle of the posterior third part of the base of the skull. The principal peculiarities in the general form of the more strongly marked negro skull, may be referred to the two characters of lateral compression or narrowing of the entire cranium, and the greater projection forwards of the jaws. The head is proportionally narrower, and the upper jaw is more protruded, than in the ordinary form of other races. Some anatomists have fancied they have discovered certain points of relation between the skulls of negroes and those of monkeys. Now, as the negro skull is the narrowest and most-elongated of human skulls, and as the crania of apes and all other animals of the monkey tribe are much longer and narrower than those of men, it could hardly be supposed but that some points of resemblance should exist between the ape and the African. These analogies are of much less weight than they are supposed to be. The differences between the heads of simiæ and those of men have been already described." Dr Prichard says, he has "carefully examined the situation of the foramen magnum in many negro skulls. In all of them the position may be accurately described as being exactly behind the transverse line bisecting the antero-posterior diameter of the basis cranii." This is precisely the place which Professor Owen has pointed out as the general position of the occipital foramen in the human skull. In those negro skulls which have the alveolar process very protuberant, the anterior half of the line above described is lengthened in a slight degree by this circumstance. If allowance be made for it, no difference is perceptible. "The difference," says Dr Prichard, "is in all instances extremely slight, and it is equally perceptible in heads belonging to other races of men, if we examine crania which have prominent upper jaws. If a line is let fall from the summit of the head, at right angles with the plane of the basis, the occipital foramen will be found situated immediately behind it, and this is precisely the same in negro and in European heads." The projection of the muzzle, or to speak more correctly, of the alveolar process of the

upper jaw-bone, gives to the negro skull its peculiar deformity, and to the face its ugly, monkey-looking aspect; and to the same circumstance, the difference noticed by Camper, in the facial angle between the head of the European and the head of the negro may be attributed. In the negro, the external organ of hearing is also wide and spacious, and, as it appears, proportionately greater than in Europeans. The mastoid processes represented in the chimpanzee by a protuberant ridge behind the auditory foramen, and which Sœmmering remarks *can scarcely be discovered in apes*, are as fully formed in the negro as in our own race. In the negro, the styloid process of the temporal bone is fully and strongly marked; in the chimpanzee, ourang-outang, and all apes, it is *entirely wanting*. Wormian or triquetral bones have been thought to be rare in the skulls of Africans, and Blumenbach even doubted their existence in the crania of any of the African races. There is an Australian skull in the museum of Guy's hospital, in which there are some of considerable size, and Dr Prichard describes a negro's skull in his possession having Wormian bones. He also justly remarks, that the features of the negro races are by no means widely diffused, in so strongly-marked a degree, as some descriptions might lead us to suspect. The negroes of Mozambique have a considerable elevation of forehead, and an examination of several crania in the museum of Guy's hospital, of the negroes of this locality, will show that they display a less protuberance of jaw. The facial angle contains, according to Professor Camper's tables, 80° in the heads of Europeans—in some skulls it is much less—and in negroes only 70°. In the ourang it has been estimated at 64°, 63°, and 60°. This error has been already pointed out; an angle of 60° is the measurement of the skulls of young apes. Professor Owen has shown the facial angle of the adult troglodyte to be only 35°, and in the ourang, or satyr, it is only 30°. The Peruvian cranium described by Tiedemann, possesses so very remarkable a configuration, that some might be inclined to adopt his opinion, that it belonged to an original and primitive race, were it not known that it had been produced by artificial means. We have examined several of such skulls brought from Titicaca, in Peru; and in another place have given a sketch of a skull brought from this locality, and which is now in the museum of the Royal College of Surgeons. Dr Morton has given several drawings of skulls, so altered by this pressure as almost to have lost the outlines of humanity. In one skull brought from Peru, the intervention of art is very manifest in the depression of a forehead naturally low. The lateral swell is not very remarkable, and the parietal protuberances are flattened, and these two peculiarities are the well-known types of the formation of the crania of these people. That the Caribs of St Vincent flattened the heads of their offspring is well known, and the inspection of Blumenbach's engraving of a Carribean skull

will convince any one of the great amount of deformity which may be produced. Among the Columbian tribes, the child immediately after birth is put into a cradle of peculiar construction, and pressure is applied to the forehead and occiput. After the head has been compressed for several months, it exhibits the most hideous appearance, the anterior-posterior diameter is the smallest, while the breadth from side to side is enormous, thus reversing the natural measurements of the cranium. In comparing the measurements of the negro's skull, with that of an European, it must be remembered that many of the skulls in our museums do not present the true characters of this race—they have been taken from unfortunate creatures kidnapped on the coast, or their enslaved offspring, and that conclusions are to be drawn from the formation of the head in the whole race, and not from the crania of particular museums. With regard to the brain, Dr Cadwell remarks, "In both the negro and Caucasian races we have the brain, which, except in point of size, is precisely the same in the African as the European." The following are the conclusions of Dr Tidemann :—*First*, In size the brain of a negro is as large as an European. *Second*, In regard to the capacity of the cavity, the skull of the negro in general is not smaller than that of the European, and other human races; "the opposite opinion is ill-founded and altogether refuted by my researches." *Third*, In the form and structure of the well-possessed spiral chord, the negro accords in every way with the European, and shows no difference except that arising from the different size of the body. *Fourth*, The cerebellum of the negro, in regard to its outward form, fissures, and lobes, is exactly similar to that of the European. *Fifth*, The cerebrum has for the most part the same form as that of the European. *Sixth*, The brain in internal structure is composed of the same substance. *Seventh*, The brain of the negro is not smaller, compared as to size, nor are the nerves thicker. *Eighth*, The analogy of the brain of the negro to the ourang-outang is not greater than that of other races, "except it be in the greater symmetry of the gyri and sulci, which I very much doubt." As these features of the brain indicate the degree of intellect and faculties of the mind, we must conclude that no innate difference in the intellectual faculties can be admitted to exist between the negro and European races. The opposite conclusion is founded on the very facts which have been sufficient to secure the degradation of this race. "The more interior and natural the negroes are found in Africa, they are superior in character, in arts, in habits, and in manners, and possess towns and literature to some extent. Whatever, therefore," says Robinson, "may be their tints, their souls are still the same." It is the opinion of Dr Prichard also, that there is nothing whatever in the organization of the brain of the negro which affords a presumption of inferior endowment of intellectual or moral faculties. This writer has also given the

weight of several skulls of nearly the same size, from which it would appear that there is little constant difference. The average weight of the brain of an European is about 44 ounces, troy weight: Dupuytern's brain weighed 64 ounces; Cuvier's, 63 ounces; Abercromby's, 63 ounces. The brain of the celebrated Dr Chalmers only reached 53 ounces; he had a large head.*

NOTE B.

THE VEDDAHS OF CEYLON.

I have been most obligingly permitted by Sir James Emerson Tennent to transcribe the following highly interesting account of the Veddahs, or Wild Men of the Jungle, from his very interesting and yet unpublished volume on the Physical and Social History of Ceylon, and which cannot fail to be deeply interesting to all our readers:—

"At Birtenve I had an opportunity of acquiring some of the information which I desired regarding the progress and success of the attempt made by government to introduce civilization amongst the Veddahs. The district which they inhabit lies to the east and south, extending from the base of the Badulla and Owna hills towards the sea.

"It is incorrect to apply the term savages to these harmless outcasts, for they exhibit neither in disposition nor action any of those vices which we are accustomed to associate with that name. Their history and origin is unknown. They are conjectured, and with some appearance of truth, to be a remnant of the aboriginal inhabitants of Ceylon, driven before the Malabar invaders into those wilds and fastnesses, whence, from some unaccountable cause, they never emerged again, nor returned to civilized life. They all live more or less by hunting and by the use of the bow; but they have been hitherto known by the distinctive names of 'Rock' and 'Village' Veddahs; the latter approaching the confines of civilization, cultivating now and then a little rice, and submitting to live in houses; the former keeping closely to the forests, subsisting on roots and the produce of the chase, and lodging in caves, or under the shelter of overhanging rocks, and frequently sleeping on the trees. In the choice of their food, they are almost omnivorous, no carrion or vermin being too repulsive to their taste. Fruits, roots, and grain they consume when procurable; birds, bats, crows, owls, and kites, when they can bring them down with the bow; but

* See Introductory Essay to Bohn's Ed. of Pickering on the Races.

for some unexplained reason, they will not touch the flesh of bears, elephants, or buffaloes, though abundant in their hunting grounds. The flesh of deer and other animals they dry on stages in the sun. They invariably cook their meat with fire, and avow their preference to the quava and roasted monkeys above all other dainties. The Rock or Wild Veddahs are divided into small tribes or families, differing in no respect except in relationship or association, but agreeing to divide the forest amongst themselves into hunting fields, the boundaries of which are marked by streams, hills, rocks, or some well-known trees. These conventional allotments are always honourably preserved from violation amongst themselves. Each party has a headman, the most energetic senior of the tribe, who divides the honey when taken at a particular season, but beyond this he exercises no sort of authority. The produce of the chase they dry and collect for barter on the borders of the inhabited country, whither the ubiquitous moormen resort, carrying cloths, axes, arrow-heads, and other articles, to exchange for deer-flesh, elephants' tusks, and bees' wax. In these transactions, it is said, the wild Veddahs are seldom seen by those of whom they come to buy, but that in the night they deposit the articles which they are disposed to barter with some mutually understood signals as to the description of those they expect in return, and which, being left at the appointed place the following evening, are carried away before sunrise.*

"It is questionable whether some of the most savage of these poor outcasts have any language whatever; and one gentleman who resided long in their vicinity has assured me that not only is their dialect incomprehensible to a Singalese, but that even their communications with one another are made by signs, grimaces, and guttural sounds, which bear no resemblance to distinct words or systematized language. They have no marriage rites, although they have some sense of the marital obligation, and the duty of supporting their own families. The match is settled by the parents. The father of the bride presents his son-in-law with a bow; his own father assigns him a right of chase in a portion of his hunting grounds. He presents the lady with a cloth and some rude ornaments, and she follows him into the forest as his wife. The com-

* The conjecture has already been adverted to, that the Veddahs are a remnant of the Yaksas or Yakkas, the original inhabitants of Ceylon, addicted to the worship of serpents and demons, till converted to Buddhism after the visit of Buddha. Fa Hian, the Chinese traveller, who visited Ceylon A.D. 412, and whose travels have been translated by Remuses and Klaprath, says :—"The kingdom of Lions," as he calls it, "was originally inhabited only by demons, genii, and dragons; nevertheless, merchants of other countries traded there. *When the season for the traffic came, the genii and demons appeared not, but set forward their precious commodities, marked with the exact price. If these suited, the merchants paid the price, and took the goods.* This country *is temperate, and the vicissitude of winter and summer is unknown.* The grass and trees are ever verdant, and the sowing of the fields is at the pleasure of the people. There is no fixed season for that."—Laidly's Translation, c. xxxviii., p. 332.

munity are too poor to afford polygamy. A gentlenan who, in a hunting excursion, had passed the night near a clan of wild Veddahs, described to me their mode of going to rest. The chief first stretched himself on the ground, after having placed his bow at hand, and clutched his hatchet, which is always an object of much care and solicitude. The children and younger members next lay down around him in close contact for sake of the warmth, whilst the rest took up their places in a circle at some distance, as if to watch for the safety of the party during the night. They have no religion of any kind—no knowledge of a God, or of a future state —no temples, idols, altars, prayers, or charms; and, in short, no instinct of worship, except, it is said, some addition to ceremonies analogous to devil-worship, to avert storms and other natural phenomena; and they send for devil-dancers when sick, to drive away the evil spirit who inflicts the disease. The dance is executed in front of an offering of something eatable, placed on a tripod of sticks, the dancer having his head and girdle decorated with green leaves. He first shuffles with his feet to a plaintive air, and by degrees works himself into a state of great excitement and action, accompanied by whining and screams, and, during this paroxysm, professes to receive instruction for the cure of the patient. So rude are the Veddahs in all respects, that they do not bury their dead, but cover them under leaves and brushwood in the jungle. They have no system of *caste* amongst themselves; but, singular to say, this degraded race are still regarded by the Singalese as of the most honourable extraction, and are recognised by them as belonging to one of the highest castes. This is in pursuance of a legend, to the effect that a Veddah, chased by a wild animal, took refuge on a tree, whence all night long he threw down flowers to drive away his pursuer. But in the morning, instead of a wild beast, he found an idol under the tree, who addressed him with the announcement, that as he had passed the night in worshipping and offering flowers, the race of the Veddahs should ever after take the highest place in the caste of the Vellabes, or cultivators, the highest of all. The Veddahs smile at the story, and say they know nothing of it; but, nevertheless, a Veddah would not touch meat dressed by a low-caste Kandyan, though he would eat with any high-caste Singalese. The Village Veddahs are but a shade removed from their wretched companions; but there is a want of sympathy or association between them, arising, on the one hand, from a dread of the wild life of the Veddahs of the Rock; and, on the other, a dislike to the habits of those who incline towards civilization. The Village Veddahs are, probably, more or less the descendants of Kandyans who have intermingled with this wild race; and their offspring, from their intercourse with the natives of the adjoining districts, have acquired a smattering of Tamil in addition to their own dialect of Singalese. They wear a bit of cloth a little longer than

their fellows of the forest, and the women ornament themselves with necklaces of brass beads, and with bangles cut from the chank shell. The ears of the children, when seven or eight years old, are bored with a thorn by the father. They have no idea of time or distance; no name for hours, days, or years. They have no doctor or knowledge of medicine, beyond applying bark or leaves to a wound. They have no games, no amusements, no music; and as to education, it is so utterly unknown, that the Wild Veddahs are unable to count beyond five on their fingers. Even the Village Veddahs are rather migratory in their habits, removing their huts as the facilities vary for cultivating a little Indian corn, and growing wild yams; and occasionally they accept wages from the Moormen for watching their paddy fields to drive away the wild animals at night. Their women plait mats from the palm leaf, and the men make bows with strings prepared from the tough bark of the kitta-gaha or Upas tree, but beyond these they have no knowledge of any manufacture. Another tribe of the Veddahs, who might almost be considered a third class, have settled themselves in the jungles near the sea between Batticoloa and Trincomalee, and subsist by assisting the fishermen in their operations, or in felling timber for the Moormen, to be floated down the great rivers for exportation. The Rock Veddahs till lately resided almost exclusively within the Binterme forests, and consisted of five sets or hunting parties, but it is obvious that no data whatever exist for forming any estimate of their gross population. The settlement of the Village Veddahs approach the lakes and districts round Batticoloa; and mingling by slow degrees with the inhabitants on the outskirts of that region, it is difficult now to assign a precise figure to their probable numbers; but they do not exceed 140 families, divided into nine little communities, distinguished by peculiarities known only to each other. The Coast Veddahs are principally in the vicinity of Evador, and the shores extending northward towards Venloos Bay, where they may probably number 350 individuals. The entire number of Veddahs of all classes in Ceylon has been estimated at 8000, but this is obviously a mere conjecture, and an exaggerated one. Mr Atherton, the assistant government agent of the district, who has exhibited a laudable energy in seconding the efforts of the government to reclaim these poor outcasts, speaks in favourable terms of the gentleness of their disposition, apparent amidst extreme indifference to morals; though graver crimes are rare amongst them. In case of theft, the delinquent, if detected, is forced to make restitution, but undergoes no punishment. If a girl is carried off from her parents, she is claimed and brought home, and the husband of a faithless wife is equally contented to receive her back, his family inflicting a flogging on her seducer. Murder is almost unknown; but when discovered, it is compromised for goods or some other consideration paid to the relatives of the deceased. Generally speaking, Mr Atherton de-

scribes the Veddahs as gentle and affectionate to each other, and remarkably attached to their children and relatives, and widows are always supported by the community, and receive their share of all fruits, grain, and produce of the chase. 'They appeared to him a quiet, submissive race, obeying the slightest intimations of a wish, and very grateful for the least attention or assistance. They are occasionally accused of plundering the fields adjacent to their own haunts; but on investigation it is invariably proved that the charge was false, and brought by the Moormen with a view to defraud the Veddahs, whom they habitually impose upon, cheating them shamefully in all their transactions of barter and exchange.' About the year 1838, the condition of this unhappy people attracted the attention of the governor, Mr Stewart Mackenzie, and he attempted to penetrate their country, but was turned back by a violent attack of jungle fever. The assistant government agent, however, with the Wesleyan Methodist missionaries at Batticoloa, were commissioned to place themselves in communication with the Veddahs, and to make them offers of land, and houses, seed, grain, tools, and protection, if they would consent to abandon their forest life, and become settlers and cultivators in the low country. Mr Atherton and the Rev. Mr Stott succeeded on their journey in obtaining the fullest and most accurate information procurable as to the actual condition and sufferings of the Veddahs. Their destitution they found to be such, that in one community they found seven families with but one iron mamotic (hoe) amongst them for the cultivation of the whole settlement; and such was their actual want of even weapons for the chase, that but one arrow was left in a family, to the head of which Mr Atherton gave twelve, with directions to divide them with three others, but so ignorant was the chief of the party that he could not separate them into four equal parcels. Many of the Rock Veddahs were willing to avail themselves of the offer of settlement and assistance, but firmly refused to remove from the immediate vicinity of their native forests. Cottages were therefore built for them in their own district, rice land assigned them, wells dug, cocoa-nuts planted; and two communities were speedily settled at Vippany Madoo, close by their ancient hunting fields, where they were provided with seed, hoes, and axes, for agriculture, and clothes and food for their immediate wants; a schoolhouse was subsequently erected, and masters sent to instruct them, through the medium of Singalese, and the experiment so far succeeded that other settlements on the same plan were afterwards formed at other places, —the principal being in the Biotiooc District at Oomany and Villingclavelly. The schoolmasters, however, at the first locality misconducted themselves. The neighbouring Kandyans were unfavourable to the measure, and the settlement at Vippany Madoo was eventually broken up, and the Veddahs again dispersed; but the good effects of even this temporary experiment were apparent; no one of the

Veddahs returned again to their caves and savage habits, but each built for himself a house of bark on the plan of the one he had left, and continued to practise the cultivation he had been taught. The other colony at Oomany continues to the present day prosperous and successful; twenty-five families are resident around it; rice and other grains are produced in sufficiency, and cocoa-nuts are planted near the cottages. The only desertions have been the departures of those in want of employment, who have removed to other villages in quest of it. The school was only lately closed, owing to there being no children at the time requiring instruction; and the missionaries have been so successful, that the whole community professed themselves Christians, and abandoned their addiction to devil-dances. Their former appellation, derived from the peculiarity of their habits, can no longer apply; and it may be thus said that the distinction of the Rock Veddahs has ceased to exist in that part of the country—all having more or less adopted the customs and habits of the villagers. Amongst the Village Veddahs themselves, the efforts of the government have been even more successful; their disposition to become settled has been confirmed by permission to cultivate land, and encouraged by presents of tools and seed grain; and upwards of eighty families have recently been formed into villages under the direction of Mr Atherton. A few have refused all offers of permanent settlement, preferring their own wild and wandering life and casual employment as watchers or occasional labourers amongst the Moorish villages; but, generally speaking, the mass are becoming gradually assimilated in their habits and intermingled with the ordinary native population of the district. The third class, the Coast Veddahs, to the amount of about 300, have, in like manner, been signally improved in their condition by attention to their wants and comforts. They were the last to listen to the invitations, or accept the assistance of government; but at length, in 1844, they came in, expressing the utmost reluctance to abandon the seashore and the water, but accepted gladly patches of land, which were cleared for them in the forest near the sea. Cottages were built, fruit trees planted, and seed supplied; and they are now concentrated in the beautiful woody headlands around the Bay of Venloos, where they maintain themselves by fishing or cutting ebony and satinwood in the forests, which is floated down the river to the bay. Education has made progress; the Wesleyan missionaries have been active. The great majority have embraced Christianity; and there can be no reasonable doubt, that within a very few years the habits of this singular race will be absolutely changed, and their appellation of Veddahs be retained only as a distinctive name. Formerly the vast tract of forest between the Kandyan mountains and the sea, frequented by these people, and known as the great Veddah Ratta, or country of the Veddahs, was regarded with apprehension by Europeans, excited by the exaggerated representations of the Kandyans as to their

savage disposition, and none but armed parties ventured to pass through their fastnesses. This delusion has been entirely dispelled of late years; and travellers now feel themselves as safe in the vicinity of the Veddahs as in that of the villages of the Singalese. They are constantly visited by traders in search of deer's horns and ivory, and the inhabitants of Velapy depend on their wild neighbours for their supply of dried flesh and honey. The Veddahs themselves have in a great degree cast aside their timidity, and not only come out into the open country with confidence, but even venture into the towns for such commodities as they have the means to procure from the bazaar. The experiment has cost the government but a few hundred pounds; and I am warranted in saying that the expenditure has been well repaid by even the partial reclamation of this harmless race from a state of debasement, scarcely if at all elevated above that of the animals whom they follow in the chase. The morning after our arrival at Birtenve, a party of Veddahs, about sixty in number, were brought in by the head-man, to be exhibited before us; it was altogether a melancholy spectacle. We were assured that they were Rock Veddahs, but this I doubt; they were more likely unsettled stragglers from the Veddah villages, with perhaps a few genuine denizens of the forest. But they were miserable objects, timid, though active, and deformed, though athletic, with large heads and misshapen limbs, their long black hair and beard fell down to their middle in uncombed lumps; they stood with their faces bent towards the ground, and their restless eyes twinkling upwards with an expression of uneasiness and alarm. They wore the smallest conceivable patch of dirty cloth about their loins, and were each armed with an iron-headed axe stuck in their girdle, and a rude bow strung with bark, with a handful of clumsy iron-headed arrows. At our request they shot at a target; but they exhibited no skill, only one arrow out of three rounds striking the central mark. In fact, I believe they are all indifferent marksmen, and bring down their game by surprise rather than adroitness with the bow. They danced for us after the exhibition of their archery, shuffling with their feet to a low and plaintive chaunt, and shaking their long hair till it concealed all the upper part of their body, and as they excited themselves with their exercise, they uttered shrill cries, jumped in the air, and clung round each other's necks. We were told that the dance generally ended in a kind of frenzy, in which they eventually sunk in exhaustion on the ground; but the whole affair was too repulsive and too humiliating to abide the arrival of this *dénouement*, and we dispersed the party with a present of some silver to each, which they received without any apparent emotion, and slunk off into the jungle. Some few afterwards returned to be hired as coolies to carry our light baggage towards Batticaloa.

"On our route thither, we encountered straggling parties of Ved-

dahs at several points of the journey, but they all presented the same characteristics of wretchedness and dejection; the children especially were very unsightly objects, entirely naked, with misshapen joints, huge heads, and swollen stomachs; and the women, who were apparently reluctant to be seen, were the most melancholy specimens of humanity I have ever seen in any country."

CHAPTER XVII.

THE UNITY OF THE HUMAN RACES PROVED FROM THE INSENSIBLE GRADATIONS OF THEIR VARIETIES, AND FROM THEIR ANALOGY TO WHAT TAKES PLACE IN OTHER ANIMALS.

To none man seems ignoble but to man.—YOUNG.

We might select thousands of the Caucasian race that are inferior to thousands of the more intelligent Africans. As the deficiency in the former would not prove that they were not Caucasians, so a lower grade of general intellect would not exclude the negro from the species to which we belong.—DR BACHMAN.

IT has been shown that nations which would now be regarded as being as different from each other as the negroes are from the white race, were once identical, and that others, from a long residence in new countries, and a total change of circumstances, have been essentially modified in colour, form, shape, and character. This, as Dr Wiseman has fully demonstrated, is beyond all doubt. The Hindoos differ from us in colour and shape, and yet they are proved linguistically to be from the same original stock. The Abyssinians are perfectly black, and yet certainly belong by origin to the Semitic family, and consequently to a white race. The natives of Congo, the Toulahs, and other tribes in Central Africa, are perfectly black without a sign of negro features. The people of Mahass, again, have the black colour, and the lips of the negro, but not the nose or the high cheek-bone.* The descendants of Europeans in India have totally changed

* Lecture iv., passim, pp. 129, 133, 136, 137, 139.

their colour, including Persians, Greeks, Tartars, Turks, Arabs, and Portuguese.* The skulls of the white settlers in the West Indies differ sensibly in shape from those in Europe, and approach to the original American configuration.† The common people among the Arabs are blacker, their hair more woolly and crisped, and their bodies more low and slender than their chiefs, who are better provided for.

Among our American Indians, we find every variety of form and colour. Humboldt, speaking of the fair tribes of the Upper Orinoco, says, "The individuals of the fair tribes whom we examined, have the features, the stature, and the smooth, straight black hair which characterizes other Indians. It would be impossible to take them for a mixed race, like the descendants of natives and Europeans, and they are neither feeble nor Albinos." Dr Morton informs us of other races of Indians that are black: "The Charruas, who are almost black, inhabit the fifteenth degree of south latitude, and the yet blacker Californians, are twenty-five degrees north of the Equator." Here, then, we have the white transparent colouring matter, as well as the black pigment, existing in tribes that Dr Morton asserts are positively composed of only one and the same race. It cannot fail, therefore, to be satisfactory, at least to him, that colour cannot be regarded as essential in the designation of a species, since he quotes and endorses the views of Humboldt, in reference to white races of Indians, points out to us a race almost black, and

* Wiseman, lecture iv., p. 139. "India," says Bishop Heber, "has been always, and long before the Europeans came hither, a favourable theatre for adventurers from Persia, Greece, Tartary, Turkey, and Arabia, all white men, and all in their turn possessing themselves of wealth and power. These circumstances must have greatly tended to make a fair complexion fashionable. It is remarkable, however, to observe how surely all these classes of men, in a few generations, even without any intermarriage with Hindus, assume the deep olive tint, little less dark than a negro, which seems natural to the climate." "*The Portuguese*," he adds, "*have, during a three hundred years' residence in India, become nearly as black as Caffres.*"

† Ibid., p. 140.

then another still blacker (which would be a little blacker than a coal could make them), and all these, according to his essay, are of one race, originating on our continent. Dr Morton also shows, that the apparently opposite races of civilized and barbarous tribes are connected together by intermediate tribes so gradually divergent, that they cannot be assigned to either extreme.*

The same is true, as has been shown, of the African nations. We see, indeed, an astonishing difference, when we place an ugly negro (for there are such, as well as ugly Europeans) against a specimen of the Grecian ideal model; but when we trace the intermediate gradations, the striking diversity vanishes. "Of the negroes of both sexes," says Blumenbach, "whom I have attentively examined, in very considerable numbers, as well as in the portraits and profiles of others, and in the numerous negro crania, which I possess or have seen, there are not two completely resembling each other in their formation; they pass, by insensible gradations, into the forms of the other races, and approach to the other varieties even in their most pleasing modifications. A Creole whom I saw at Yverdun, born of parents from Congo, and brought from St Domingo by the Chevalier Treytorrens, had a countenance of which no part, not even the nose, and rather strongly marked lips, were very striking, much less displeasing; the same features with an European complexion would certainly have been generally agreeable." "We are, therefore," says Dr Bachman, "obliged to confess that we have not much faith in those lines of demarcation which naturalists have assigned to the several races of men, since there are scarcely two of them that agree, and since, moreover, there would be more varieties that could not conveniently be forced into either race, than in the individuals that compose the races themselves."†

The different races of men are thus found to be connected together by insensible shades, through which they seem to

* Inquiry, p. 15.

† See Essay, p. 164, &c.

blend into each other.* This gradation is found not only among the different races, but even among those of the same race. Thus in the same Polynesian race, while some are hardly distinguishable from a negro tribe, allied through inseparable links to the negroes of Africa, others depart so far from it, as to approximate, in symmetry of form in the body and skull as well as in colour, to the natives of Europe. And in these gradations we trace a corresponding scale of civilization.

The existence of such gradations, almost from one extreme to the other in the same race, is not peculiar to these tribes. The Malays exhibit a similar variety.

The Jew of the same race is at this day perfectly distinguishable from the Europeans that surround him, though West and other eminent artists have found it impossible to characterize him by any particular distinctive traits. "This permanence of physiognomy," says the Quarterly Review, "is evidently traceable to a supernatural cause, which prevents the usual modification of features in order to accomplish an important object." Into this it is not our province now to enter, yet we cannot help remarking that the Jew is a witness, not of one truth, but of many truths. Marvellously does he illustrate the consistency of the original unity of man with the most extensive diversity. His features have been cast in an eternal mould, but his colour is dependent on outward causes. Natural law is forbidden to operate on the one, but left to take its course with the other. A fixed physiognomy declares the unity of the people, while their diversity of complexion as distinctly manifests the influence of the climate. Every shade of colour clothes with its livery the body of the Jew, from the jet-black of the Hindoo to the ruddy-white of the Saxon. The original inhabitant of Palestine was doubtless dusky-skinned and dark-haired, but the cooler sky and more temperate air of Poland and Germany have substituted a fair complexion and light hair. On the other hand, the

* Wiseman, pp. 147, 148, &c.; their intercommunication and gradual approximation is here illustrated; and see also pp. 197, 206, 210, 221-225.

scorching sun of India has curled and crisped his hair, and blackened his skin, so that his features alone distinguish him physically from the native Hindoo. On the Malabar coast of Hindostan are two colonies of Jews—an old and a young colony—separated by colour. The elder colony are black, and the younger (dwelling in a town called Mattabheri) comparatively fair, so as to have obtained the name of "white Jews." The difference is satisfactorily accounted for by the former having been subjected to the influence of the climate for a much longer time than the latter.

Even in the Caucasian race, as Hamilton Smith allows, there is every variety of colour, from the pure white down to melanism nearly as deep as a genuine negro.* The Gipsies we may here likewise mention as an instance of a tribe which, proved by its language to be of Indian origin, has lost much of its original configuration, and particularly the olive colour of its country, by living in other climates. Thus, even the smallest varieties once produced are never again obliterated; and yet not therefore are they marks of independent origin. Even families may transmit them, and the Imperial House of Hapsburg has its characteristic feature. And whence arises this indelibility, by natural processes, of varieties by natural processes introduced? This should seem to be one of the mysteries of nature, that we may in any thing compel her to place her signet, but we know not how again to force it off. Man, like the magician's half-skilled scholar, so beautifully described by the German poet, possesses often the skill whereby to compel her to work, but has not yet learnt that which might oblige her to desist.†

To what we have said on this point we will add the very pregnant remarks of Captain Fitzroy, of the Royal Navy, and Governor of New Zealand, in his essay on the early migrations of the human race.‡ "In the course of years

* Nat. History, pp. 368, 378, 379.

† Prichard, ibid., see also Lawrence, pp. 206, 226, 304, 305, 307, 308, 309.

‡ Narrative of the Surveying Voyages of the Adventure and Beagle, vol.

spent in various quarters of the world, I have had opportunities of leisurely considering people from all the principal countries. I have read much of what has been written, during late years, on the subjeet of their resemblance, or their difference; and the conclusion which I have been obliged to come to is, that there is far less difference between most nations or tribes (selecting two for the comparison), than exists between two individuals who might be chosen out of any one of those nations or tribes, colour and hair alone excepted."

Before dismissing this argument, we would again observe, that it is to the neglect of this gradation of the different races of men that the tendency to regard the extreme varieties as distinct species has in great part arisen. The numerous gradations found among all the different races, among portions of the same race, and among individuals of the same tribe, state, and even family, form an insuperable objection to the notion of specific difference. There is not, in fact, one of the bodily differences of the Senegal negro and the model of European beauty, which does not gradually run into that of the other by such an imperceptible variety of shades, that no physiologist or naturalist is able to draw a line of demarcation between the different gradations.* In fact, the real sum of all the varieties observable amongst mankind is by no means so great as the apparent, nor are they more striking or uncommon than those which so many thousands of other species of organized beings—and which are not exposed to any thing like the same causes tending to produce them as in the case of man—exhibit before our eyes.†

ii., p. 642. On the gradations of men and the sophistical argument founded on looking at extrême varieties, see also an old article in the learned Bryant's Works on the Truth of the Christian Religion. Lond. 1810. 3d edition. "Of the Negroes," p. 245, &c.

* Encycl. Brit., vol. xiv., pp. 201, 203, and Dr Wiseman, pp. 147, 149, &c.

† "Every kind of climate, habits, food; for while each species of animals, inferior to man, is mostly confined to a limited region, and to a mode of existence that is simple and uniform, the human races are scattered over

In their Report on the Life and Works of Blumenbach, the French Academy of Sciences remark :—"The third rule of Blumenbach is the foundation of science itself. We limit ourselves to the comparison of extremes. But the rule of Blumenbach requires us to pass from one extreme to the other, through all the intermediate parts, and through all the possible shades. The extreme cases seem to divide the human race into distinct races—the gradual shades of variation, the intermediate links, make all men of the same blood."

If, therefore, among all other organized beings separate species do not pass into each other by insensible degrees, it follows that all the races of men must be of one and the same species.*

We are thus led to call attention, distinctly, as another ground of confirmation, to the argument derived from analogy. Analogy, we are aware, cannot prove the fact of the unity of the human family, but it can meet and answer and set aside objections founded upon difficulties and differences, by showing that these occur equally in other departments of the kingdom of nature. For if difficulties and differences not less in *degree*, and the same in *kind*, are found in other departments of nature, *where a* UNITY *of species and of origin is admitted*, their existence among men cannot prove any diversity of species among them. This argument, which has been so elaborately presented by Dr Prichard, would apply *first* to the origin of the human family. It has been shown, in both the animal and vegetable kingdoms, that while tribes of the most simple structure are spread in the present time, and appear to have been originally diffused over the most distant regions, races of a higher and more elaborate organization exist only in places to which, it is generally obvious,

the whole face of the earth, under every variety of physical circumstances, in addition to the influences arising from a moral and intellectual nature." See also Lawrence, p. 352.

* See Prichard's Res., vol. ii., pp. 341, 342, 345; and Carpenter's Physiology, p. 84; and London Quarterly Review, January 1850, pp. 14, 16, 17.

but always probable, that they may have obtained access from some particular spot, apparently the local centre and primitive habitation of the tribe. Hence we derive each tribe among the higher and more perfectly organized creatures, whether locomotive or fixed, whether animals or plants, from one original point and from a single stock. We are *à fortiori* at liberty to apply this conclusion to the instance of the human species, or to infer that the law of nature, otherwise universal or very general in its prevalence, has not been in this case transgressed, where such an exception would be of all cases the most improbable.

The argument from analogy will also apply, *in the second place*, to the dispersion of the human family from one centre. It is not self-evident that many families of the same species were not created at first to supply at once with human, as well as with other organized beings, various regions of the earth. This, indeed, is improbable, when we take into account the almost universally rapid increase of living species, and the surprising efficacy of the means every where contrived by nature, both for their multiplication and dispersion, which would seem to be superfluous, or at least much greater than could be requisite, on the hypothesis that a multitude of each tribe existed from the beginning.

But, *thirdly*, this argument from analogy will also apply to the variations in the human family. As our space will not allow us to present any details, we cannot do better than give the inferences deduced by Prichard upon this subject.

1. That tribes of animals which have been domesticated by man, and carried into regions where the climates are different from those of their native abodes, undergo, partly from the agency of climate, and in part from the change of external circumstances connected with the state of domesticity, great variations.

2. That those variations extend to considerable modifications in external properties, colour, the nature of the integument, and of its covering, whether hair or wool, the structure

of limbs, and the proportional size of parts; that they likewise involve certain physiological changes or variations as to the laws of the animal economy; and lastly, certain psychological alterations or changes in the instincts, habits, and powers of perception and intellect.

3. That these last changes are in some cases brought about by training, and that the progeny acquires an aptitude to certain habits which the parents have been taught; that psychical characters, such as new instincts, are developed in breeds by cultivation.

4. That these varieties are sometimes permanently fixed in the breed so long as it remains unmixed.

5. That all such variations are possible only to a limited extent, and always with the preservation of a particular type, which is that of the species. Each species has a definite or definable character, comprising certain undeviating phenomena of external structure, and likewise constant and unchangeable characteristics in the laws of its animal economy and in its physiological nature. It is only within these limits that deviations are produced by external circumstances.

To take a particular illustration, Blumenbach has compared man with swine, between whom there is in many respects a very wonderful analogy. Now, no naturalist, he affirms, has carried his scepticism so far as to doubt the descent of domestic swine from the wild boar.* All the varieties, therefore, through which this animal has since degenerated, belong, with the original European race, to one and the same species; and since no bodily difference is found in the human race, either in regard to stature, colour, the form of the skull, or in other respects, as will presently appear, which is not observed in the same proportion in the swine race, this comparison, it is to be hoped, will silence those sceptics who have thought proper, on account of those varieties of the human species, to admit more than one species.

* See also Dr Lawrence, p. 250.

In pursuing the argument, he says, the whole difference between the cranium of a negro and that of an European, is not in the least degree greater than that equally striking difference which exists between the cranium of the wild boar and that of the domestic swine. I shall then add that the swine in some countries have degenerated into races which, in singularity, far exceed every thing that has been found strange in bodily variety amongst the human race.

From these facts, Blumenbach concludes, that as it is absurd to maintain that the vast variety of swine have not descended from one original pair, so it is not less unreasonable to contend that the varieties of men constitute so many distinct species.

On the contrary, while the numerous gradations found in each point of difference forms "an insuperable objection to the notion of specific difference among men," these analogies, drawn from the animal kingdom, clearly demonstrate that all the differences among men are only variations among the species.

CHAPTER XVIII.

ORIGIN OF THE VARIETIES OF THE HUMAN SPECIES.

The character of the true philosopher is to hope all things not impossible, and to believe all things not unreasonable.—SIR J. F. W. HERSCHELL, DIS. NAT. PHIL.

The immense extent of our ignorance compared with that of our knowledge, has been only the more powerfully forced upon the minds of philosophers as discovery has advanced; and, in emphatic language, was the dying remark both of Newton and Laplace.—POWELL'S NAT. AND REV. TRUTH.

HAVING now presented the arguments for the unity of the human races from Scripture, science, history, tradition, and other sources, it may be proper to inquire whether there is any knowledge of the actual origin of the existing varieties of the human family.

On this subject the Bible does not inform us. It teaches us that "it is the glory of God to conceal a thing,"—and this is, we may believe, one of the many "secret things which belong unto the Lord." Nor is its revelation of any consequence or necessity to us, except as a matter of mere curiosity. It has nothing to do with the determination of the question of the original unity of all mankind. Leibnitz, in reply to Bayle, has well remarked, that the utmost which can fairly be asked in reference to any affirmed truths of Scripture is, to prove that they do not involve any necessary contradiction,* and when, therefore, it is plainly revealed that all the present races of men are the descendants of one original family, the

* Tract De la Conformité de la foi avec la raison.

fact of great existing varieties offers no objection to the belief of this truth as an established fact. It is not at all necessary to point out the time and place when the negro and the yellow variety arose in our species. It is enough to know that they have arisen from an original unity—that they imply no diversity of origin, moral character, and everlasting destiny. The Word of God and the power of God are infallible assurance of the *certainty* and of the *possibility* of these facts. And "the character of a true philosopher is to hope all things not impossible, and to believe all things not unreasonable." The progress of our knowledge marks the progress of our ignorance, and a willingness to admit this necessity is the highest attainment of the most enlightened philosopher. It is, therefore, when we listen to such philosophers, and turn away from empirical dogmatists, that we hear Newton, and Locke, and Bacon, acknowledging the necessity of "giving to faith what belongs to faith, and of not attempting to draw down or submit the mysteries of God to our reason, but contrariwise to raise and advance our reason to the divine truth."*

Many eminent naturalists and men of medical science, however, such as Dr Prichard and Dr Lawrence, believe that ALL THE VARIETIES OF MAN CAN BE ACCOUNTED FOR BY NATU-

* The great fault of human philosophy is its haste and anxiety to unravel and explain every thing. Sir J. Herschell has lately expressed his opinion, that it is impossible any longer to attempt the explanation of the movements of all the heavenly bodies by simple attraction, as understood in the Newtonian theory—these comets, with their trains perversely turned *from* the sun, deranging sadly our systematic views. Nor are there (writes Humboldt) any constant relations between the distances of the planets from the central body round which they revolve, and their absolute magnitudes, densities, times of rotation, eccentricities, and inclinations of orbit and of axis. After other remarks of the same character, he adds:—"The the axis, density, time of rotation, and different degrees of eccentricity of planetary system, in its relation of absolute magnitude, relative position of the orbits, has, to our apprehension, nothing more of natural necessity than the relative distribution of land and water on the surface of our globe, the configuration of continents, or the elevation of mountain chains. No general law, in these respects, is discoverable either in the regions of space or in the irregularities of the crust of the earth."

RAL CAUSES. In his Lectures on Man, Dr Lawrence, after examining all the differences found among men—anatomical, complexional, and physiological—says, "The facts and observations adduced lead manifestly to the following conclusions: —1. That the differences of physical organization and of moral and intellectual qualities, which characterize the several races of our species, are analogous in kind and degree to those which distinguish the breeds of the domestic animals; and must, therefore, be accounted for on the same principles. 2. That they are first produced, in both instances, as native or congenital varieties, and then transmitted to the offspring in hereditary succession. 3. That of the circumstances which favour this disposition to the production of varieties in the animal kingdom, the most powerful is the state of domestication. 4. That external or adventitious causes, such as climate, situation, food, way of life, have considerable effect in altering the constitution of men and animals; but that this effect, as well as that of art or accident, is confined to the individual, not being transmitted by generation, and, therefore, not affecting the race. 5. That the human species, therefore, like that of the cow, sheep, horse, pig, and others, is single; and that all the differences which it exhibits are to be regarded merely as varieties." *

Dr Prichard, throughout his elaborate and extensive volumes, has presented abundant and incontestable proof to show that variations in the colour, form, and other characteristics of man, have actually taken place, and that they must be accounted for in the same way as similar changes in other animals are explained, in combination with those peculiar causes to whose operations man alone is exposed. Thus, to take one or two illustrations out of many, he says: "The Arabian race of India or Aryavarta differ in physical characters from the Medo-Persian Arians. The difference is most

* Lectures on Man, pp. 375, 376. See an argument for change of features from change of place, p. 263, and that the differences in man are less than known differences in other animals, pp. 303 and 310.

striking in complexion, the Hindoos being black, while the Persians are comparatively fair, with black hair and eyes. *The cause which has given rise to this diversity can apparently be nothing else than the influence of the hot climate of Hindustan.* Every historical indication is against the supposition that the dark complexion of the Hindoos has arisen from the intermixture of an Iranian ancestry with the aborigines of India. The purity of the Sanscrit language, which would on that supposition have been merged in the idiom of the great mass of the community, precludes the notion that the Arian colonists were but a band of conquerors. All the historical traditions, and the written histories which go back to the date of the Manava Sastra are, as we have already had occasion to observe, decisive against that notion.

"Neither are the physical characters of the Hindoos such as would be produced in a mixed offspring of Iranians with the tribes resembling the Bhils or the Rajamahal Paharias. And if we were to adopt the notion that the Brahmans and Xatriyas alone were foreigners, and that they conquered and reduced the aboriginal people, and condemned them to an inferior rank, we have still to account for the black complexion of the Brahman tribe. It is true that the Brahmans are generally a comparatively fair people. But there are Brahmans extremely black, and the social regulations of the Indian community, which go back to the first ages of India, preclude the supposition that this race, at least, has been intermixed with the barbarous aboriginal tribes. *That the black colour of the Hindoos, who live in the hot plains near the tropics, is a result from the agency of temperature, is rendered extremely probable* by the consideration that the northern colonies of these very people, and the families who dwell near the sources of the sacred rivers, to which we may add the Siah-Posh of the Hindu-Khuh, are extremely fair and xanthous, with blue eyes, and all the characteristics of a northern and even of a Teutonic race." *

* Researches, vol. iv., p. 248.

In regard to Africa, Dr Prichard remarks: *

"If we inquire, in the first place, whether the physical characters of the African nation display themselves under any relation of climate, facts seem to decide the question in the affirmative, for we might describe the limits of Negroland to the north and south with tolerable correctness, by saying that it is bounded on both sides by the tropics; that is, that the native country of all the black races, properly so termed, seems to be the intertropical region. If we follow the prolongations of Central Africa to the southward of the tropic of Capricorn, we find the Hottentots, in whom the hue of the negro is diluted to a yellowish brown, and the Kaffirs, who, in the country of Bechuanas, are said to be red or copper-coloured; but here are no people resembling the black natives of equatorial Africa. To the northward of the Senegal we have the Tuaryk in the oases of the Great Desert, and wandering tribes of Arabs, in both of which races some tribes or families are said to be black, but the same races are in general brown or almost white; and the Berbers, akin to the Tuaryk, inhabiting the second system of mountains or highlands in this quarter of the world—an elevated region eight or ten degrees in breadth, and extending lengthwise through a great part of Africa, but under a temperate climate—are not like the native races of the intertropical parts, but white people with flowing hair, similar to the nations of Europe, in some high tracts displaying all the characters of the xanthous variety of mankind." "We may find occasion also to observe that an equally decided relation exists between local conditions and the existence of other characters of the human races in Africa. Those races who have the negro character in an exaggerated degree, and who may be said to approach to deformity in person—the ugliest blacks, with depressed foreheads, flat noses, crooked legs—are, in many instances, inhabitants of low countries, often of swampy tracts near the sea-coasts, where many of them, as the Papels,

* Researches, vol. ii., pp. 331, 332.

have scarcely any other means of subsistence than shell-fish and the accidental gifts of the sea. We may further remark, and perhaps this observation is fully as important as that of any other connected fact or coincidence, that the physical qualities of particular races of Africans are evidently related to their moral or social condition, and to the degrees of barbarism or civilization under which they exist. The tribes in whose prevalent conformation the negro type is discoverable in an exaggerated degree, are uniformly in the lowest stage of human society; they either are ferocious savages, or stupid, sensual, and indolent. Such are the Papels, Bulloms, and other rude hordes on the coast of western Guinea, and many tribes near the slave-coast, and in the Bight of Benin,—countries where the slave-trade has been carried on to the greatest extent, and has exercised its usually baneful influence. On the other hand, wherever we hear of a negro state the inhabitants of which have attained any considerable degree of improvement in their social condition, we constantly find that their physical characters deviate considerably from the strongly-marked or exaggerated type of the negro. The Ashanti, the Sulima, the Dahamans, are exemplifications of this remark. The negroes of Guber and Hausa, where a considerable degree of civilization has long existed, are perhaps the finest race of genuine negroes in the whole continent, unless the Golofs are to be excepted. The Golofs have been a comparatively civilized people from the era of their first discovery by the Portuguese, to which I have alluded in the preceding pages." *

Dr Prichard then proceeds to apply the same remarks to the inhabitants of the European and Asiatic continents, and with the same general results, allowing for peculiar circumstances in some special exceptions to the general rule.

In the inhabitants of the Oceanica we find every variety of the human form, features, hair, skull, and other peculiarities, except those of the Esquimaux, to whose climate there is

* Researches, vol. ii., pp. 231, 238.

nothing analogous.* If, as is believed, and the facts would indicate, the Malayo-Polynesian portion of this numerous people are all the offspring of one original colonizing stock, then *we perceive among them actual and undoubted transformations into the most extreme varieties.* Among the inhabitants of the same island are found also great variety both of features and complexion, *which can only be explained by the difference of food, exposure, and other peculiarities of condition.* "It seems," says Dr Prichard, "to have been the ultimate and full persuasion of all those persons who have made a long abode in the islands of the Pacific, *under circumstances favourable to accurate investigation,* that these phenomena can only be explained on the supposition that they result from the agency of climate and physical influences on the original race. The appearance of a xanthous complexion under moderate temperature, and among people living in a state of protection from severities of climate, is so common an observation, and *one that we have already traced in so many instances in almost every other part of the world,* that we may well look for it in the Polynesian Islands; and there, when we find this change connected and coextensive with another physical change, we may fairly infer that these connected phenomena have one and the same cause. I allude to changes in the stature, the form of the head, the quality of the hair, &c. There seems to be no other hypothesis, if we open the widest field to conjecture, that can in any way explain all the phenomena of physical variety that display themselves in the Oceanic region—and this without difficulty accounts for all of them—namely, the deviation of the primitive Malayan or Indo-Chinese type on the one side to the character of the European, and on the other to a conformation of body very similar to that of the African."

The same conclusion is drawn from an examination of the American races, among whom there is a great variety. Thus, M. D'Orbigny, a distinguished naturalist, says: "As a gene-

* Prichard, vol. v., p. 284.

ral position, we may regard each particular nation as having between its members a family resemblance, which, distinguishing it clearly from its neighbours, permits the practised eye of the zoologist to recognise, in the great assemblage of nations, all the existing types almost, without ever confounding them. A Peruvian is more different from a Patagonian, and a Patagonian from a Guarani, than is a Greek from an Ethiopian or a Mongolian. There is, indeed, a prevalent general type which may be recognised in most of the native races of both North and South America, and which is perceptible both in colour and configuration, and tends to illustrate the tendency of physical characters to perpetuate themselves; but from this type we have seen many deviations, which are sufficient to prove that it is not a specific character. The Esquimaux furnish a strong instance." The deviations noticed by Humboldt and M. D'Orbigny, and others, between the South American nations as to colour, form, and stature, afford proof that varieties spring up in these as in other races of mankind, and approximate to the characters of other departments of the human family.

"But *the assertion that the colour of the human skin has in America no relation to climate, is only the result of careless and hasty generalization.* The reader may be convinced of this by comparing the black Californians, who struck La Perouse and other travellers as the almost exact counterparts of the slaves of a negro plantation in the West Indies, with the white Haida Kolushians and other nations of the Eastern coast further northward, whose complexion was said by Portlock to be nearly that of a fair English woman. The Esquimaux are reckoned among the white races, though not fair or xanthous."

The same was the view of this subject taken by Dr S. Stanhope Smith, in his Essay on the Causes of the Variety of Complexion and Figure in the Human Species, which has obtained such permanent celebrity abroad.

Mr Prout, in his work on Chemistry and Meteorology,

exhibits at length the nature of climate; its influence upon the vegetable and animal creation; and the effect which this difference produces on the manners and the health of the earth's inhabitants.* He shows also that those plants and animals most useful to man possess, in a remarkable and inscrutable manner, the faculty of accommodating themselves to all climates, and of producing multiplied varieties.† He thus recognises, in the mutual adaptation of the constitution of nature, and the constitution of the animals and man, the source of all their existing varieties.

Mr Whewell, in his work on Astronomy and General Physics, presents very similar conclusions from his examination into the facts of the case; and in these wonderful capacities and adaptations of animal life, he sees the evidence of a wise and benevolent intention overcoming the varying difficulties, or employing the varying resources of the elements, with an inexhaustible fertility of contrivance, a constant tendency to diffuse life and wellbeing.‡ And speaking expressly of the varieties in man, he says many of these differences depend upon custom, soil, and other causes, with which we do not here meddle, but many are connected with climate; and the variety of the resources which man thus possesses arises from the variety of constitution belonging to cultivable vegetables, through which one is fitted to one range of climate, and another to another. We conceive that this variety and succession of fitness for cultivation shows undoubted marks of a most foreseeing and benevolent design in the Creator of man and of the world. §

Sir Whitelaw Ainslie, M.D., has also illustrated the necessary power of atmospheric influence in moulding the physical and moral character of men and other animals, and has quoted Falconer on Climate to the same effect. ||

* Chemistry, Meteorology, &c., b. ii., pp. 204, 215, 218.

† Ibid., p 219. ‡ Ibid., b. ii., p. 60. § Ibid., p. 62.

|| M.R.A.S., F.R.S.E., &c. Obs. on, in five parts, &c. See Journal of the Royal Asiatic Society, No. v., &c.

Brande also attributes all the varieties in man and the lower animals to the influence of climate, habits, and social condition.* Kenrick, as quoted by Prichard, does the same.† Such also is the view taken by Mr Delafield and his coeditor, Dr Lakey, who endeavour to point out in the southern hemisphere of the earth the causes of man's uniform degeneracy under its influence—even of the Dutch, the Spaniard, and the English, when long exposed to its deteriorating character. This they attribute to the short summer, the immense body of water, the less distance of the sun, and to magnetic intensity.‡

Heeren, in his work on the African nations, attributes the complete assemblage of all varieties of form and colour in that country to the existence, within its immense extent, of every variety of soil, climate, and condition.§

Dr Bachman has shown that the facts of natural history prove that all quadrupeds, birds, and plants, when in a state of domestication or of cultivation, are subject to the most remarkable change when removed to other soils, latitudes, and conditions, and that when formed, these varieties become in many cases permanent. This he illustrates from the apple, the peach, the potato, the cabbage, the carrot, and from all the common fowl and quadrupeds.‖ He is therefore of opinion that God has stamped upon the race of men a constitutional power to produce, under the influence of analogous causes, analogous and permanent varieties. This subject Dr Bachman treats in a distinct chapter.¶ After giving the views of others, and pointing out the undoubted influence of climate, he there says:** "Our explanation of this phenomenon is grounded on the constitutional adaptation or

* Cyclopedia, p. 712, col. 2.

† Prichard, vol. v., p. 552, Essay on Primitive Chronology.

‡ Antiq. of America, pp. 108–124.

§ Vol. i., pp. 286, 287.

‖ On the Unity of the Human Races, examined on the principles of Science. Charleston, 1850, pp. 13, 14.

¶ See part ii., ch. iv., p. 175.

** Ibid., p. 179.

predisposition to produce varieties which are developed in particular situations and under peculiar circumstances. We agree in the results, but we differ in the causes which produce these effects. Their theory is, as we have seen, founded principally on the influence of climate, gradually changing the colour, form, and hair. Cold and temperate climates they suppose have a tendency to produce the white colour on the skin and straight hair, and warm climates to cause a black colour with crisped hair. Ours rests on an adaptation in the human constitution to produce a succession of strikingly marked varieties, in those countries where such a peculiarity in constitution is suited to the regions it is required to inhabit, —in other words, different climates require different constitutions, and a wise Creator has implanted in the organization of man an adaptation to produce such modifications as are essential to the health, comfort, and future increase of his posterity.

What are the causes in nature to produce first a peculiarity in climate, and then an adaptation of the constitution suited to that climate, are subjects which, owing to our imperfect knowledge of the laws of the Creator, the wisest philosophers are unable fully to explain. The production of these varieties may be the effects either of altitudes or depressions in countries—of geological formations—of electrical phenomena —of peculiar atmospheres—of soils—of an approximation to, or a removal from, the ocean—of particular kinds of food and manner of life, or of all these causes combined. The effects, however, are before our eyes in every country, in every tribe of men, and in every race of domesticated animals; and could we be permitted to see more clearly into the hidden mysteries of nature, we would find no difficulty in accounting for the causes why, from time to time, offspring differing widely from the parents is produced in different regions of country. A tendency to produce such varieties exists in such countries, since we perceive that they spring up in various localities at the same time. This, in a short period

of time, often in the course of a few generations, becomes a native and preponderating variety. This variety is propagated by generation, in accordance with another law of nature, taught us by experience, that peculiar formations in animals and men become organic, and are transmitted to their posterity. The traveller in Europe, in looking at the descendants of the Caucasian race, is struck with a peculiar cast of countenance in the inhabitants of the various kingdoms, possessing nearly the same latitudes and geological formations. Thus an Englishman, a Scotchman, an Irishman, a German, a Frenchman, or an Italian, may be recognised by the close observer, without inquiring into their several places of nativity. We see and admit these striking characteristics, but we cannot tell why this is so.

From the account given of his lectures on the Races of Men, Dr Knox, F.R.S.E., believes that there are transcendent characteristics of the human system, by which race is permanent so long as the existing media and order of things prevail, but that a great change in these might produce a modification in animal forms that would constitute new races.*

The same seems to be the view of Agassiz. Though he does not believe that the diversity of animals is in exact proportion to longitude or latitude, yet "there is," he says, "a direct relation between the richness of a fauna and the climate." "Animals," he adds, "are endowed with instincts and faculties corresponding to the physical character of the countries they inhabit, and which would be of no service to them under other circumstances." And while he does not allow these differences to be *produced by climate*, he does allow that animals have been constitutionally adapted by God for the place which they inhabit, and for a change adapted to the modifications of climate and condition, when domesticated by man. The way in which these changes are produced, he very wisely does not attempt to explain. "Hence," he says, "other influences must be in operation besides those

* Ethnological Journal, No. ii., p. 94.

of climate—influences of a higher order, which are involved in a general plan, and intimately associated with the development of life on the surface of the earth." Now, man alone being a cosmopolite—man alone being omnivorous—and man alone being adapted to every variety of association, clothing, and habitation—and the transition from man the rude barbarian, to man the civilized and refined being, the greatest possible—whatever influence outward circumstances are capable of exerting upon an organized being must be increased a hundredfold in the case of man, under all his diversified conditions. And as man was originally destined and otherwise adapted for the occupation and culture of the whole earth, we might well expect that he would be constitutionally fitted also for every variety of change.

"Indeed, (to use once more the language of Agassiz,) the facilities, or sometimes we might rather say, necessities, arising from varied supplies of animal and vegetable food in the several regions, might be expected to involve, with his corresponding customs and mode of life, a difference in the physical constitution of man, which would contribute to augment any primeval differences. It could not indeed be expected that a people constantly subjected to cold, like the people of the north, and living almost exclusively on fish, which they cannot obtain without great toil and peril, should present the same characteristics, either bodily or mental, as those who idly regale on the spontaneous bounties of tropical vegetation."*

Faber supposes that, in the first instance, the colouring fluid of the negro was a disease inflicted upon some remote progenitor or some collective body of progenitors; the symptoms of the disease subsequently remaining when the disease itself had been removed.†

* Principles of Zoology, p. 181, &c.

† Eight Dissertations, p. 293, vol. ii., and pp. 306, 307, and 313, where he gives ancient authorities in favour of such a supposition as widely spread among the Gentiles; and from Scripture, pp. 310, 311.

The influence of climate and other physical causes, in combination with social, civil, and moral condition, may, it is true, be *exaggerated*, as they undoubtedly have been by some who argue in favour of the original unity of the human races. It is just as true, however, that the influence of such causes may be as greatly *underrated*, as it certainly is by many opponents of this doctrine.* We confess, that when to the present necessary and powerful influence of these causes are added the peculiar condition of the earth at the period of man's early history—the equally irregular and exposed condition in which men were at that time placed—the lengthened period of patriarchal life—the confinement of marriage within the limits of close affinity—and the multiplied geological convulsions through which the earth has undoubtedly passed, and which must have given inconceivable intensity to all such causes†—we have ourselves no difficulty in supposing that every present variety in the races of men may have originated through the working of natural causes upon the naturally susceptible constitution of primitive man.

To those whose opinions we have already adduced, we would add the following remarks from the elaborate work of Dr Carpenter:—

"From the foregoing survey of the phenomena bearing upon the question of the *specific* unity or diversity of the human races, the following conclusions," says this writer, "may be drawn:—

"1. That the physical constitution of man is peculiarly disposed, like that of the domesticated animals, to undergo variations, some of which can be traced to the influence of external causes, whilst others are not so explicable, and must be termed spontaneous.

* The apparently contradictory facts stated by the Ethnological Journal have all been examined by Prichard, and either disproved, qualified, or accounted for.

† See this exhibited at large by Hamilton Smith in his Nat. Hist. of the Human Species.

"2. That the extreme variations which present themselves between the races apparently the most removed from one another, are not greater in *degree* than those which exist between the different breeds of domesticated animals, which are known to have descended from a common stock; and that they are of the same *kind* with the variations which present themselves in any one race of mankind,—the difference of *degree* being clearly attributable, in the majority of cases, to the respective conditions under which each race exists.

"3. That none of the variations which have been pointed out as existing among the different races of mankind have the least claim to be regarded as valid specific distinctions; being entirely destitute of that fixity which is requisite to entitle them to such a rank, and exhibiting, in certain groups of each race, a tendency to pass into the characters of some others.

"4. That, in the absence of any valid specific distinctions, we are required, by the universally-received principles of geological science, to regard all the races of mankind as belonging to the same species, or (in other words) as having had either an identical or similar parentage; and that this conclusion is supported by the positive evidence afforded by the agreement of all the races in the physiological and psychological characters that most distinguish them from other species, and especially by the ready propagation of mixed breeds or hybrid races." *

"It cannot," he adds, "be doubted, when the known history of the domesticated races is fairly considered, that a change of external circumstances is capable of exerting a very decided influence upon the physical form, upon the habits and instincts, and upon various functions of life. The variations thus induced extend to considerable modifications in the external aspect, such as the colour, the texture, and the thickness of the external covering; to the structure of limbs

* Carpenter's "Principles of Human Physiology," pp. 90, 91. Philadelphia, 1847.

and the proportional size of parts; to the relative development of the organs of the senses and of the psychological powers, involving changes in the form of the cranium; and to acquired propensities, which, within certain limits (depending, it would appear, on their connection with the natural habits of the species), may become hereditary.

"Again, we should expect to find these varieties in external circumstanees, together with the change of habits induced by civilization (which is far greater than any change affected by domestication in the condition of the lower animals), producing still more important alterations in the physical form and constitution of the human body, than those effected in brutes by a minor degree of alteration. And it may be reasonably anticipated, that, as just now explained, there would be a greater tendency to the perpetuation of these varieties, in other words, to the origination of distinct races, during the earlier ages of the history of the race, than at the present time; when, in fact, by the increasing admixture of races which have long been isolated, there is a tendency to the *fusion* of all these varieties, and to a return to a common type."*

To these authorities we add the views of Dr Dowler. "It may be affirmed," says he, "with considerable probability, that cultivation changes even the organization, developing, for example, the anatomy, increasing the nutrition, the sensibility, the adaptive powers, and the energy of the whole nervous system, especially of its intercranial portion."†

The same views have been very recently and ably presented by Mrs Somerville in her elaborate work on Physical Geography, in which she devotes a full chapter to the consideration of the various causes by which such diversities of race have been produced in the human species, which she believes to have been originally one and the same.

* Carpenter's "Human Physiology," p. 81.

† On the Vital Dynamics of Civil Government, in New Orleans Medical Journal, May 1849, p. 708. See also Dr Daniell, in Prichard's Nat. Hist., p. 612, 3d ed.

"No circumstance in the natural world," says this writer, "is more inexplicable than the diversity of form and colour in the human race. It had already begun in the antediluvian world, for 'there were giants in the land in those days.'

"Civilization is supposed to have great influence on colour, having a tendency to make the dark shade more general, and it appears that, in the crossing of two shades, the offspring takes the complexion of the darker and the form of the fairer.

"Darkness of complexion has been attributed to the sun's power from the age of Solomon to this day—'Look not upon me, because I am black, because the sun hath looked upon me;' and there can be no doubt that, to a certain degree, the opinion is well founded. The invisible rays in the solar beams, which change vegetable colours, and have been employed with such remarkable effect in the Daguerreotype, act upon every substance on which they fall, producing mysterious and wonderful changes in their molecular state—man not excepted.

"Even supposing that diversity of colour is owing to the sun's rays only, it is scarcely possible to attribute the thick lip, the woolly hair, and the entire difference of form, extending even to the very bones and skull, to any thing but a concurrence of circumstances, not omitting the invisible influence of electricity, which pervades every part of the earth and air, and possibly terrestrial magnetism.

"Every change of food, climate, and mental excitement, must have their influence on the reproduction of the mortal frame; and thus a thousand causes may co-operate to alter whole races of mankind placed under new circumstances, time being granted.

"The refining effects of high culture, and, above all, the Christian religion, by subduing the evil passions and encouraging the good, are more than any thing calculated to improve even the external appearance. The countenance, though perhaps of less regular form, becomes expressive of the ami-

able and benevolent feelings of the heart, the most captivating and lasting of all beauty.

"Thus, an infinite assemblage of causes may be assigned as having produced the endless varieties in the human race; the fact remains an inscrutable mystery. But amidst all the physical vicissitudes man has undergone, the species remains permanent."*

To these various authorities we are most happy to be able to add that of Dr Latham, as given at some length in his recent and most valuable work on the Varieties of Man.

"Other conditions being equal," he asks, "why do two tribes under the same degree of latitude differ? *e. g.*, Why are not all tribes under the equator like the negro of the Niger, and *vice versa?*

"Without venturing upon the enumeration of all the elements of this difference, I will indicate one, assuming only that the climatological influences of a certain degree of latitude have some effect, and that some effect must be the result of the force in question: I call it the accumulation of climatologic influences.

"Let a certain locality under a given degree of latitude (say the west coast of Africa, under the equator) be peopled by a line of population migrating from Denmark, under one supposition, and from Bombay, under another, the line of migration being, for convenience sake, supposed to be a straight one.

"From Denmark such a line, at its junction with the point in question (say the mouth of the Gaboon River), would form with the equinoctial line, and with each intermediate degree of latitude, a right one.

"From Denmark the angle would be a very acute one.

"Now, just as the angle formed by the line of latitude and the line of migration is acute, the approach made by a moving population towards any particular point under that line (of latitude) is gradual; and in proportion as such an approach

* Physical Geography, chap. xxxiii.

is gradual, the number of generations over which a condition of climate like that of the final point has been acting is increased; and in this way its influences become accumulated.

"Thus, assuming Bombay to be the original cradle of our species—

"The Gaboon negro is the descendant of ancestors who, before they reached their present abode, had moved in a line lying almost wholly within the tropics; whereas—

"The American of Terito is the descendant of ancestors who passed through the tropics by the shortest cut (*i.e.*, at nearly a right angle with the equator), themselves descended from progenitors upon whom the influences of the several North American, Arctic, and Siberian climates had been at work.

"In the latter case, how great have been the changes and how rapid the transitions from the conditions of one latitude to another! how different, too, the effects upon a series of generations moving along a line a thousand miles long from north to south, from those upon a stream of population propagated along an equal distance east and west!

"The former takes them through half the latitudes of the world. The latter keeps them within a single zone—arctic, equatorial, or temperate, as the case may be; the climatologic influences seconding, instead of counteracting those of blood, and that in a ratio progressing geometrically."*

Again, speaking of the African, Dr Latham observes: "In respect to the general phenomena of ethnological distribution, we are now fully prepared for all that will be presented in Africa. Large areas covered by single nations, and small ones parcelled out amongst many, are what we have already seen both in Asia and America. The influences of a climate at once tropical and continental, we shall find at their maximum; those of extended river-systems, and of mountain-ranges of the first magnitude, being less important. So also is the influence of the ocean; the insular system of Africa being the

* Latham, pp. 524-526.

smallest in the world, and the African seaboard being the one least indented.

"From the greater heat of climate, the steppes of High Asia become sandy deserts in Africa; whilst the central portion of the continent, where the highest table-land is to be expected, has yet to be explored.

"Still the effect of a high level above the sea, as manifested, for instance, in Abyssinia, is to be taken into our consideration of the physical conditions of Africa, *i. e.*, as a condition that, to a certain degree, in certain cases, counteracts the effects of excessive heat. On the other hand, alluvial tracts, like the valleys of the Nile and Niger, are to be placed in the opposite scale, as assistant to the influences of a tropical and equatorial sun." *

"Thus, in respect to descent, the negro of Sennaar has his closest relations, in the way of language, manners, and blood, with the Africans of Kordofan, Abyssinia, and the parts about his own country. Not so, however, his physical conformation. These are with the Africans of Senegambia and Guinea,—a fact brought about by the common conditions of heat, moisture, and a low sea-level—conditions, however, which render the group artifical and provisional, rather than natural and permanent. The same would be the case if we threw all the mountaineers of Europe into one and the same class, irrespective of their real ethnological differences, simply on the ground of their all exhibiting certain common phenomena of colour, stature, and habits." †

"And now the comment upon the words typical and subtypical negroes finds place. The two divisions coincide closely with the physical character of the area to which each applies; the departure from the true negro features being greatest where the approach to a high-land or a table-land is the closest; the Bornui being at one and the same time the most like the negroes of the coast and the occupants of the most notable basin of central Africa, *i. e.*, the basin of Lake Ishad." ‡

* Latham, pp. 469, 470. † Ibid., p. 472. ‡ Ibid., p. 482.

"Hence," says Dr Latham, "transitional forms are of two kinds. The first indicates descent, affiliation, and historical connection; the second, the effect of common climatologic, alimentary, or social influences. This last will be called quasi-transitional." *

Speaking of the Turanian stock, he further adds:—"The reader is now asked to prepare himself for the transition from languages of monosyllabic type to languages other than monosyllabic, and from aptolic tongues to tongues where the inflexions are numerous.

"He is also asked to prepare himself for a transition in the way of physical conformation, from a structure approaching the Mongol type to one essentially and typically Mongol.

"In the former case the change is greater than in the latter.

"Why is this? Why do not the changes go *pari passu*, so that the two tests should coincide, and so that it should be a matter of indifference which of the two we started with?

"We get at the answer to this by remembering that physical changes and philological changes may go on at different rates. A thousand years may pass over two nations undoubtedly of the same origin, and which were, at the beginning of those thousand years, of the same complexion, form, and language. At the end of those thousand years there shall be a difference. With one, the language shall have changed rapidly, the physical structure slowly; with the other, the physical conformation shall have been modified by a quick succession of external influences, whilst the language shall have stayed as it was. With an assumed or proved original identity on each side, the difference in the rate of action, on the part of the different influences, is the key to all discrepancies between the two tests. The language may remain in *statu quo*, whilst the hair, complexion, and bones change; or the hair, complexion, and osteology may remain in *statu quo*, whilst the language changes. Apparently this leaves matters in an unsatisfactory condition, in a way which

* Latham, p. 9.

allows the ethnologist any amount of assumption he chooses. Apparently it does so, but it does so in appearance only. In reality we have ways and means of determining which of the two changes is the likelier. We know what modifies form. Change of latitude, climate, sea-level, conditions of subsistence, conditions of clothing, &c., do this, all (or nearly all) such changes being physical." *

"One condition necessary for a race that thus spread themselves abroad, occurs in a remarkable degree with the Turk. In the Yakut country, we find the most intense cold known in Asia; in Pamer, the greatest elevation above the sea-level in the south of Egypt, an intertropical degree of heat. Yet in all these countries we find the Turk. In their physiognomy, the Turks have in many instances departed from the Mongol type; and hence the agreement between the cognate families is less manifest in their physical conformation than in their languages. The nature and extent of this deviation is well worth more investigation than it has met with; and next in importance to the fact itself, is the reason that may be assigned for it. Whether it may be from the Osmanli Turk of Constantinople, with his un-Mongolian length of beard, his regularly-formed eye, and his other European points of physiognomy, being the standard by which we measure the other divisions of the family, or whether we have unnecessarily restricted the term Mongol to the inhabitants of Mongolia, it is certain that a great majority of travellers are in the habit of describing a Mongol cast of countenance, when found in a Turk, as an exceptional phenomenon; just as if the Turk had one character and the Mongol another, and as if a deviation either way was an anomaly. Now, the notice of all differences, however small, between the tribes of the Turk and those of any other division of the human kind, is so far from being exceptionable, that it is particularly desirable.

"Neither is the assumption of the Turk in his most European

* Latham, pp. 61, 62.

form as a standard, rather than that of the more Mongoliform Turks, objectionable. One writer is as fully at liberty to treat all deviations from the type of a Constantinopolitan Osmanli as anomalous, as another is to apply a Mongol standard. Provided that facts are accumulated, ethnology is the gainer. It is only when the idea of the Turk type being one thing, and the Mongol another, has so far taken possession of a writer, as to make him overvalue the import of such differences, that evil arises. Then a fact which should even be expected *a priori* becomes an anomaly, and the assumption of some extraordinary cause—generally the mixture of race—is assumed. I say assumed, because in many cases it is taken for granted, simply and solely because it will explain the phenomena. Where this is not the fact, where there are other grounds for believing that intermixture has occurred, it is not only legitimate, but it is necessary to admit it." *

"Physiological objections, based upon the symmetry of shape, and delicacy of complexion, on the part of the Georgians and Circassians, I am at present unable to meet. I can only indicate our want of osteological data, and remind my reader of the peculiar climatologic conditions of the Caucasian range, which is at once temperate, mountainous, wooded, and in the neighbourhood of the sea; in other words, the reverse of all Mongol areas hitherto enumerated. Perhaps, too, I may limit the extent of such objections as a matter of fact. It is only amongst the chiefs where the personal beauty of the male portion of the population is at all remarkable. The tillers of the soil are, comparatively speaking, coarse and unshapely." †

"I think, that if we base our primary divisions of the great Oceanic stock upon difference of physical form, they will not be more than two, although, by raising the value of certain subdivisions, the number may be raised to three, four, five, or six.

"Now, as the value of the members of the Oceanic groups is a point upon which there is a variety of opinion, and as

* Latham, pp. 77, 78. † Ibid., p. 111.

the opinion of the present writer as to its unity as a whole is at variance with the systems of ethnologists, with whom he is diffident of disagreeing, it will be well to take more than usual pains to give prominence to the leading facts upon which the current opinions are based; and, for the sake of fuller illustration, to carry the reader over the subject by two ways.

"A. One class of the Oceanic islanders is yellow, olive, brunette, or brown, rather than black, with long black and straight hair; and when any member of this division is compared with a native of the continental portions of the world, it is generally with the Mongol.

"B. Another class of the Oceanic islanders is black rather than yellow, olive, brunette, or brown; and when any member of this division is compared with a native of the continental portions of the world, it is generally with the negro. As to the hair of this latter group, it is always long, sometimes strong and straight, but in other cases crisp, curly, frizzly, or even woolly. Upon these differences, especially that of the hair, we shall see, in the sequel, that subdivisional groups have been formed.

"The social, moral, and intellectual difference between these two classes, in their typical form, is certainly not less than the physical—probably more. The continuous geographical area is,—for the black division, New Guinea, Australia, Tasmania, New Ireland, and the islands between it and New Caledonia. For the brown division, all the rest of the Oceanic area—Sumatra, Borneo, Java, the Moluccas, the Philippines, the South Sea Islands, the Carolinas, &c.

"Now, this is one way of viewing the subject, and it is the way which gives us the contrast in the most marked manner, the typical instances of each group being put forward.

"But another point of view limits the breadth of difference.

"It may have been noticed by the reader, that in speaking of the area occupied by the black and brown nations respectively, I used the word continuous. This was done for the

sake of preparing the way for a new series of facts. In many of the countries proper and peculiar to the brown or straight-haired occupants, there are to be found, side by side with them, darker-complexioned fellow-inhabitants, blackish and black tribes, tribes with crisp hair, tribes with woolly hair, and tribes with hair and hue of every intermediate variety. Furthermore, wherever the two varieties come in contact, the black and blackish tribes are the lower in civilization, generally inhabiting the more inaccessible parts of their respective countries, and, in the eyes of even cautious theorists, wearing the appearance of being aboriginal."*

"This brings us to the third question, as to the import of the darker-coloured populations in areas more especially belonging to the brown and olive-coloured tribes. I do not see how we can consider these as aught else but the lighter-coloured populations in a ruder stage of society; since, unless we take this view, we must look upon them as the representatives of a separate section of the human kind—a supposition against which there are the two following objections:—

"*a.* That the difficulties respecting the population of the Polynesian area are just doubled by such an assumption; since, instead of having to account for the undoubted Polynesians alone (a matter quite difficult enough of itself), we should then have to account for an earlier migration of Negritos as well.

"*b.* That, if such a previous migration had taken place, we should expect to find, considering the vast number of Polynesian islands, at least one island where the blacker race remained unmixed, and (as such) speaking the original non-Polynesian language, which is implied in the assumed independence of origin; since it is exceedingly unlikely that a second migration should have so nearly coincided with a former one, as to people and leave unpeopled exactly the same areas. Now, out of all the isles of the South Sea, none presents the phenomenon of a pure black population, as determined by the double test of colour and of language.

* Latham, pp. 131, 132.

"On the other hand, it may be urged—*a*. That, although it may be a matter of doubt with competent judges whether improved physical and social conditions have so great an influence upon the colour of the skin and the texture of the hair, as is imagined by some extreme thinkers on the point, it is generally admitted that they have some influence.

"*b*. That in some groups (and sometimes in particular islands) the identity of the darker and lighter-coloured population is beyond a doubt, coinciding, as it does, with such differences.

"*c*. That transitional forms occur where it is wholly gratuitous to assume the influence of intermixture.

"With this opinion, our view of the relations between the continuous Kelænonesian areas of the mixed population would be as follows:—

"*a*. That at a period anterior to the development of the proper Malay and Polynesian characters of the typical Protonesians, New Guinea and Australia were peopled from the Moluccas and Timor respectively, the immigrants having a type which might lose or gain Kelænonesian character according to circumstances.

"*b*. That the conditions of Protonesia and Polynesia favoured the change from dark to fair, those of New Guinea and Australia from fair to dark." *

"This gives us the following theory:—

"1. That Kelænonesia was peopled when navigation was so much in its infancy as for the Protonesians to be limited in their migrations by the north-west monsoon.

"2. That Polynesia was peopled when it was sufficiently advanced for the same people to be independent of it.

"3. That the differentiæ between the lighter and darker Protonesians is referable to the influences of Asiatic civilization." †

"The notices of tribes darker in colour than the dominant part of the population, of which we have seen so much in the

* Latham, pp. 257–259. † Ibid., pp. 259, 260.

Oceanic area, reappear in the history of Japan. They are stated to belong to either the interior or the southern portion of the empire. This, however, may be the case without involving the necessity of assuming a second source for the population; at the same time, such a second source is no ethnological improbability. The darker Amphinesians of Formosa may possibly have tended farther northward." *

"The Malagasi have already been enumerated amongst the Oceanic Mongolidæ. Why were they, then, only mentioned by name, and why do they now find a place at the end of the Atlantidæ? The reason lies in the antagonism between the evidence of their language and the evidence of their physical conformation, the first pointing exclusively towards Malacca, the latter partly towards Malacca and partly towards the opposite coast of Africa. The phenomenon of intermixture is, in this case, so likely, that the doctrine that the Malagasi are Africans speaking a Malay language, or, at least, that there is a strong African intermixture, almost forces itself upon the investigator.

"There is nothing, however, in what has hitherto been noticed, which induces me to admit any African element at all; since, after considerable reflection and hesitation, I have come to the conclusion that the differences in physical form, as described by many excellent observers, are not greater than those which occur within the pale of the Amphinesian populations themselves." †

NOTES.

THE POWER OF EXTERNAL CAUSES TO MODIFY SPECIES.

Professor Lowe, in his very able and extensive work on the Domesticated Animals, has some important and valuable observations strongly confirmatory of our own conclusions. But as it will be of some length we will reserve it for the Appendix.

* Latham, p. 279. † Ibid., pp 519, 520.

VIEWS OF HIPPOCRATES.

THAT the minds and bodies of men, says Dr Knox, are influenced to a certain extent by external circumstances, I see no reason to deny. But this is not the real question; the question is, To what extent? Let us first consider the effects of climate. Hippocrates was enough of a philosopher to see that it was not merely to the atmosphere that was to be assigned the supposed influence exercised by external circumstances over man's form and mind. Accordingly, he entitles his work Περι ὑδατων, ἀερων, και τοπον, which may be thus translated, On the influence of the Waters, the Atmosphere, and Locality, over Man.

CHAPTER XIX.

ORIGIN OF THE VARIETIES OF THE HUMAN SPECIES—CONCLUDED.

The degree of evidence for any proposition is not to be learned from logic, nor, indeed, from any one distinct science, but is the province of whatever science furnishes the subject-matter of our argument.—ARCHBISHOP WHATELY.

Many events are altogether improbable to us before they have happened, or before we are informed of their happening, which are not the least incredible when we are informed of them.—MILL'S LOGIC.

THE origin of the varieties of the human races is not connected by any natural or logical necessity with their original unity. The fact of their original unity may be infallibly certain, while the time and manner of their variations are enveloped in undiscoverable mystery. To many philosophers we have seen these varieties appear to be the result of natural constitutional organization, in connection with the natural laws of external nature and social condition, operating through a long series of ages. But if to any these causes are insufficient, the Bible offers, with its record of man's original unity, and of man's subsequent dispersion and diversified allotment, the omnipotent agency of that overruling Providence which

> "Lives through all life, extends through all extent,
> Spreads undivided, operates unspent"—

and by whose wise determination their bounds and habitations were assigned. It teaches us that the same Almighty Being who made of one blood all the nations of men to dwell on all the face of the earth, also secured his own purposes in

the peopling of every portion of the globe, by adapting men in a supernatural manner, at the time of the dispersion, to the climate and condition to which they were thus destined. The belief of this supernatural cause as the source of all present varieties in man, so far as it may be necessary to look to it rather than natural causes, is therefore required of us by the very necessity of the case, and by the authority of God.

Such is the course in which reason and true science alike conduct us. These demand a cause—a cause adequate to the effects to be accounted for; and these require also our admission of such a cause, when its existence is proved by sufficient evidence. Now, that God exists, and that his power is sufficient to meet the difficulties in the case, all true science affirms. He is recognised as the Creator and Preserver of man and beast, even by those who question the original unity of the present varieties of the human race. And if, therefore, this great First Cause is admitted even by our opponents in the first creation of man, and in the contemporaneous or subsequent creation of all the varieties of men, it is no less scientific to believe—if there is evidence for the opinion—that this Omnipotent Being secured the production of all these varieties in man's primitive constitution, either to render certain the peopling of the earth—to adapt men to its diversified climates—to provide materials for the future invigoration or elevation of certain races by amalgamation with others—or, in some cases, as a curse inflicted upon some guilty and rebellious people. And as there is evidence in Scripture to prove that all the present nations of the earth were originally made of one blood, our faith in the present unity of the human races is rational, whether we do or do not believe that the changes in them could be brought about by natural and constitutional laws. When, therefore, we hear men, as we do Mr Drake, Dr Nott, the Ethnological Journal, Voltaire, Mr Gliddon, &c., ridicule, with profane and vulgar buffoonery, the doctrine of the unity of the human races, because it requires the exercise of supernatural

power, when they themselves profess to attribute the existence of every variety of man to that very supernatural cause, we plainly perceive that their objections are not made to the doctrine for its own sake, but to the inspiration and authority of that Bible by whose testimony this, and many other doctrines still more unpalatable to the pride of man, are infallibly proclaimed.

To every mind imbued with the proper spirit of reverence for God and his inspired communications, there is the most perfect harmony between the *scientific inability* to account for the variations of the human races from the original type by existing natural causes, and the *moral ability* to believe on the best of all evidences—the testimony of God—that such is nevertheless beyond controversy THE FACT. And whether God brought about these changes at the time of Cain, as some think, or of the flood, or of the dispersion, or of the exodus from Egypt, as others think, is a matter of no importance to him whose faith rests upon the testimony and the infinite —though oftentimes inscrutable—wisdom and goodness of God.

Such is the position, as we understand it, of Dr Morton, who has, with such lustre to himself and to his country, investigated the ethnological history of the human family. He adopts the arrangement of mankind under "THE HUMAN SPECIES," containing under this one species five races and twenty-two families.* His introductory essay is "on the *varieties* of the human species."† "The unity of the human species," says his able reviewer, "is assumed by Dr Morton,"‡ not, however, because he could prove it or believe it to be a fact from present physical evidence, or the operation of present natural causes, but because it is clearly taught in the Bible. He believes, therefore, that God adapted each

* See Crania Americana, and Inq. into the Aborig. Race of America, pp. 47, 48.

† Introd. to Crania Amer.

‡ Silliman's Journal, vol. xxxviii., No. ii., p. 4.

race to its peculiar destination. 'The idea,' he says, 'may, at first view, seem incompatible with the history of man, as recorded in the sacred writings. Such, however, is not the fact. Where others can see nothing but chance, we can perceive a wise and obvious design displayed in the original adaptation of the several races of men to those varied circumstances of climate and locality, which, while congenial to the one, are destructive to the other. The evidence of history, and of the Egyptian monuments, go to prove that these races were as distinctly stamped three thousand five hundred years ago, as they are now; and in fact that they are coeval with the primitive dispersion of our species.'" *

Similar is the spirit and conclusion of Dr Caldwell, in his very able, though unnecessarily severe, review of the essay of Dr Stanhope Smith.† In this essay he denies the sufficiency of climate, and other natural causes, to explain the existing diversities of the human races; but he as certainly and clearly affirms his belief that they are *varieties* from an original identity.

"Men," says he, "have sustained from their creation very signal changes in their complexion and figure. The object or final cause of these changes is supposed to be the adaptation of the human race to become inhabitants of the different climates of the globe. Their efficient or productive causes are undetermined. Our only intention is to endeavour to prove, which we think may be most definitely done, that the varieties, as to complexion and figure, which now exist in the great family of man, were not, and indeed could not have been, produced by the operation of the physical causes to which the Rev. Dr Smith attributes them."

Again, he says, "On the correctness of the Mosaic account of the creation of man, we place the most full and implicit reliance. We receive the Scriptures entire as the oracles of

* Inquiry, p. 36. See on Dr Morton's position, Dr Bachman on Unity, &c., p. 246.

† Port-Folio, vol. iv.

divine truth, and have neither the arrogance nor the impiety to question a fact which they clearly set forth. Whatever they may contain that is above our reason and comprehension, as ordinarily exercised, we embrace and cherish as a matter of faith. Nor have we ever presumed to make our feebleness of intellect the standard of their immaculate verity." *

The belief of a divine power exerted for the production of the varieties of the human family, was, we have seen, mythologically preserved among the classic nations, in the fable of Phæton. It is very openly and boldly taught in the Koran, as if communicated by God himself, and this too as a reason for the observance and praise of his infinite wisdom.

There is also a very curious traditionary legend, in which a divine origin is attributed to the variety of human races, still found among the Tonga islanders in the South Seas. They believe that originally there was no land above the waters of the sea; but that when one of their gods, named Tongalou, was fishing in the ocean, his hook became fixed at the bottom; he exerted his strength, and presently there appeared above the surface of the water several points of rock, which increased in number and extent the more he drew his line. The rocky bottom of the ocean was now fast advancing to the surface, when, unfortunately, the line broke, and the Tonga Islands remain to show the incompleteness of the operation. The earth, thus brought to the light of day, now became replete with all kinds of plants and animals (such as exist in an imaginary island, called Bolotoo, or the residence of the gods), but they were of an inferior quality, and subject to decay and death. Tongalou now sent two of his sons to dwell in Tonga, and to divide the land between them. But one of these sons was industrious, and the other idle, and envious of his brother, whom at length he killed, for which his father confined him and his race to the Tonga

* Port-Folio, vol. iv., p. 148. See also pp. 11, 18, 48.

Islands for ever, to be black in their persons, and to have bad canoes; while he sent the children of his murdered son into a distant land, to be white in their colour as their minds were pure; to be wise and rich, and to have axes and large canoes in the greatest abundance.*

Seeing, therefore, that the Bible does not require us to believe that the varieties in the human races were brought about by the operation of present and merely natural causes, scientific inquiry is left to pursue its investigations into their origin perfectly untrammelled, so long as it does not go beyond its province, and—because it may not be able to explain them in consistency with an original unity of species, that is, of origin—sceptically deny that God either has or could have effected them.

There are, however, others to whom it may seem more in accordance with the facts in the case to combine, in the production of the varieties of the human races, both the supernatural and the natural causes. Among those who hold this opinion we may rank Mr Kirby, who has considered the subject at some length. He shows that many animals, known to be of the same origin, exhibit differences so striking as to appear to a young zoologist marks of specific difference—that these depend upon climate, food, and cultivation by man—that their improvement of character and habits may probably be deemed the result of some developments of brain produced by education, and present some analogy to the effect of the latter in the human species—and that by these they are enabled to follow man into different climates, and to accommodate themselves gradually to any change of circumstances. There is thus, he thinks, imparted to all animals a capability of improvement, and of the development of latent qualities not apparent in their wild state.

And in special reference to man, he says, "Climate, the elevation of country, its soil, waters, woods, and other pecu-

* See Fairbairne's Geology of Scripture, p. 467; and the United States Exploring Expedition, vol. vi., pp. 177, 178.

liarities; the food, clothing, customs, habits, way of life, and state of civilization often of its inhabitants, produce effects upon the different races of men as well as of the animals that inhabit our globe, and will account for many distinctions, which indicate that such an individual belongs to such a people." He adds:—"But these circumstances will not explain and satisfactorily account for all the peculiar characters that distinguish nations from each other, without having recourse to the will of a governing and all-directing Power, influencing circumstances that happen in the common course, and according to the established order of nature, to answer the purposes of his providence. When he confounded the speech and language of the descendants of Noah, congregated at Babel, he first made a division of mankind into nations; 'and from thence did Jehovah scatter them abroad upon the face of all the earth.' The same divine Power that effected this distinction, which may be called the origin of nationality, also decreed that nations should be further separated by differences of form and colour as well as speech, which differences originated, not in any change operated miraculously, but produced by second causes, under the direction of the First. When we are told expressly that 'the hairs of our head are all numbered,' and that in God's 'book all our members are written,' we learn, that in common parlance we acknowledge that it is according to God's will that we are made so and so. That persons who, in some one or other of their parts and organs, exhibit an approximation to races different from that to which they belong—as in thick lips, a prominent facial angle, a difference in the relative proportion of certain bones to each other, in the curling of the hair, and the like—occur in all places, must be obvious to every one who uses his eyes and intellect. But it is as evident that all these variations are produced by circumstances that we cannot fully appreciate.

"It is evident, therefore, from fact, and from what ordinarily happens, that there are powers at work at and after concep-

tion, and while the fœtus is in the womb, that can produce variations in the same people, approaching to those that distinguish the negro, the red man, or the brown man, which, indeed, can produce forms much more singular and extraordinary; for instance, the monsters that sometimes make their appearance in the world, as the Siamese youths, children with two heads, &c. The mysterious influence that the excited imagination, or passions, or appetites of the mother have over the fœtus in her womb, is well known, and produces very extraordinary consequences, and malformations, and monstrosities. When we consider that all these facilities, if I may so speak—these tendencies to produce variations in the fœtus, are at the disposal of Him who upholds all things by the word of his power, and turns them to the fulfilment of his own purposes, we may imagine that thus new types may be produced, which may be continued in the ordinary way of generation, according to that observation of Humboldt, that 'the exclusion of all foreign mixtures contributes to perpetuate varieties, or aberrations from the common standard.'"

CHAPTER XX.

RESUMÉ OF THE ARGUMENTS FOR THE UNITY OF THE HUMAN RACES, AND OBJECTIONS CONSIDERED.

Proximi Gallis, et similes sunt; seu durante originis vi, seu procurrentibus in diversa terris, positio cœli corporibus habitum dedit.—TACITUS.

Our argument is physical, our method strictly inductive, and our reasoning cumulative.

WE must here pause, and gather up our argument. We have shown that the unity of the human races has always been regarded as an established and indisputable fact; that on this question, as a doctrine taught in Scripture and involving its truth, all Christians of every denomination, age, and country have agreed; that it has been received as a fact by many of the most eminent and learned scholars, naturalists, physicians, ethnographers, and historians; and that as there is thus every presumption in favour of this doctrine, they who deny it must prove that it is not true by positive and incontestable evidence—evidence which they do not even pretend to adduce.

But we have gone further than was thus necessary, and have shown that every mark which has ever been laid down by naturalists to distinguish one species of animals from another, prove, when applied to man, that all the varieties of the human family are of one species. We have shown that, while all other animals of different species naturally remain separate and distinct, and when constrained to unite, produce a hybrid and sterile breed, the progeny of all the races of men, under every possible amalgamation, are neither hybrid nor sterile. We have shown that the two thousand languages

of men are found to reduce themselves to a few families, and these families to one primitive stock from which they must all have originated, and that all the races of men must, therefore, have proceeded from one common parentage. We have shown that all history confirms this conclusion, by tracing to one original, oriental source all the nations of the earth, so far as their history is known, and by recording facts which will account for the peopling of this country from the same original sources. We have shown that there are traditions, customs, manners, and peculiar habits and practices, found among the aboriginal inhabitants of this and all other countries, which are in a most wonderful manner corroborative of the early records of the Bible, and which prove that all nations must have derived them from the same original source, while as yet the human family was undivided. The testimony of the Bible to the original unity of the human races is therefore the only theory which can account for these facts which every where exist, and which are infinitely more difficult to explain than any physical differences in the colour and form of men. We have shown further, that in the great distinguishing characteristic of man in his highest elevation, that is, in his moral and religious feelings, there is, and ever has been, a most evident and—on any other hypothesis than the unity of the races—an inexplicable identity both in sentiment and practice. And while this is true of all the traditional and polytheistic religions of mankind, it is pre-eminently true that the religion of the Bible, in all its doctrines and duties, is equally adapted to all men, and produces the same effect upon all men, both when it is received and when it is rejected. We have shown that the record of Scripture, in which the original unity of the human races is taught, is antecedent to all other records—is contradicted by no other; that it records facts, and allows time sufficient to explain all the difficulties in the case; and that it is confirmed by various evidences, which prove that, beyond all controversy, "its witness is true." We have shown that all experience, observation, and experi-

ment concur in demonstrating, that while the lowest races of men possess essentially the same faculties, impulses, and capacity for instruction, improvement, and art, which characterize the highest, the subjection of the highest existing races of men to the same causes of degradation which have operated upon the lowest, and for the same period of time, would reduce them to the same condition of ignorance, superstition, and brutality. While, therefore, it is true that the original stock from which the negro races sprung was not always degraded, it is also historically true that transformations have taken place in the colour, form, and character of portions of the light-coloured races. And while there is an apparently impassable gulph between the lowest human beings—(and of these there are many lower and less developed than the negroes)—and the highest, yet when we venture upon the inquiry, we find no separate and defined boundaries of races, but a gradual and imperceptible transition from one variety to another, and a combination of varieties, in colour, form, skull, and intellect, existing among every separate race of men. We have also shown that, in the opinion of many of the ablest inquirers and most scientific men, all the varieties of the human races may be accounted for by the operation of natural causes upon the original susceptibilities of the human system; but that, when this is deemed unsatisfactory, Scripture warrants the belief that such effects were secured by the supernatural exercise of divine power.

Finally, we have shown that the analogy founded upon the working of the same laws, upon the same animal nature, and under the government of the same God, proves that the dispersion of the human family, with all its varieties, from the same parent family, is in accordance with what is known and admitted to be the case in regard to many plants and animals, in which we find multiplied and permanent varieties of the same original species. All anatomical, physiological, chronological, and historical difficulties are found, therefore, to exist as forcibly in regard to these as in the case of man, and can be as

satisfactorily met in the one case as in the other. And what analogy thus proves to be certain in the case of the same species in the animal and vegetable kingdoms, history attests in regard to the human race.* It will be seen that most, if not all the leading characters which distinguish particular human families or races, have been known to originate, and having once been introduced, have continued to appear under circumstances favourable to their propagation. In some instances, such physical peculiarities have become permanent, and typical of particular tribes through a long series of generations, approximating to the character of specific distinctions. Transitions from one physical character to another strikingly different, have sometimes taken place suddenly, or in a single generation, as in the occasional appearance of the xanthous variety among the dark-coloured races in elevated situations or in cold climates. In more frequent examples, such changes have been brought about in many successive gradations, as in the deviations which are noted among negro and Polynesian tribes in Africa and in the Oceanic countries. It must be observed, moreover, that the changes alluded to do not so often take place by alteration in the physical character of a whole tribe simultaneously, as by the springing up in it of some new congenital peculiarity, which is afterwards propagated, and becomes a character more or less constant in the progeny of the individuals in whom it first appeared, and is perhaps gradually communicated by intermarriages to a whole stock or tribe. This, as it is obvious, can only happen in a long course of time.

The unity of the human races, therefore, forms a central point, towards which all the lines of possible argument which could bear upon the subject converge—a focus which is made bright and dazzling by the light collected from every possible source—a grand fact in the history of our race to which heaven and earth alike bear witness.

* See Prichard's Researches into the Nat. Hist. of Man, vol. v., pp. 547–552, and for the full proof the entire work, and also his other works.

To these arguments in positive proof of the unity of the human races, and to the irresistible presumption by which the doctrine is sustained, what is said in reply? Is any history produced, sacred or profane, which proves an original difference of species in the human family? Nothing of the kind.

Is any people pointed out who are destitute of any one mark which has ever been laid down by any accredited naturalist for the certain distinction of species? We emphatically answer—None. "Man," says Agassiz, "although a cosmopolite, is subject, in a certain sense, to this law of limitation. While he is every where the one identical species, yet several races, marked by certain peculiarities of features, are recognised; such as the Caucasian, Mongolian, and African races, of which we are hereafter to speak."

What, then, are the objections on which the rejection of this truth is based? A difference in colour, in hair, in skull, in the pelvis, in the heel bone, in the length of the fore-arm, the position of the head, the web of the fingers, and in intellectual power.* All of which have been more or less fully discussed.

But do not similar, as great, and even greater differences than these, exist among other animals, who are nevertheless acknowledged, and indeed known to be, of one and the same species? They undoubtedly do.† And do not similar and even greater differences sometimes arise and perpetuate them-

* Dr Neill, in the American Journal of Medical Science for January 1850, pp. 78–83, points out also some difference in the occipital and superior maxillary bones.

† Dr Goode (Book of Nature, vol. ii., pp. 85, 86) says: "But the question still returns—Whence, then, proceed these astonishing diversities among the different nations of mankind, upon which the arrangment now offered is founded?

"The answer is, that they are the effect of a combination of causes; of which some are obvious, others must be conjectured, and a few of which are beyond the reach of human comprehension; but all of which are common to other animals as well as to man; for extraordinary as these diversities may appear, they are equally to be met with in the varieties of several other kinds of animals that can be proved to have been produced from a single species, and in one or two instances from a single pair."

selves, under favourable circumstances, among men of the same family, country, and race? This, also, is undoubtedly true. But are we not bound to produce evidence to prove that the negro and similar races were originally like the white races, and to show how and when the change took place? Undoubtedly we are not. For if, as we have seen, the presumption is altogether in favour of the original unity of the races, then we must conclude that unless the contrary can be demonstratively proved, these varieties took place at some time and from some causes, and have been perpetuated according to the order of nature.

But while not under *any* obligation to show *how* or *when* these changes in the human family occurred, we have given undeniable historical evidence for the *original* unity of the human family, and incontrovertible evidence for the *present* unity of all the varieties of the human race.

What, then, are the motives by which men are actuated, who deny the unity of the human races? This it is not for us to determine, beyond what parties may reveal in their writings, in their arguments, or in their conduct. Such motives *may* be purely scientific. They may be the result of prejudice. They may arise from partial views and exclusive professional experience. They may be founded wholly on that pride of race which will not, as one said to us, believe the white and black races to be of one species, though heaven and earth should unite in the demonstration of the fact. Or finally, these motives may spring from a determination to employ this instrumentality to undermine, and, if possible, to destroy the plenary inspiration and authority of the Bible. And when we hear men ridiculing the plenary inspiration and authority of the Scriptures, and the idea of a miraculous production of these varieties, while they, by multiplying species or original pairs, indefinitely multiply the occasions for such miraculous agency, we must regard them as being actuated, not by opposition to the unity of the races, but by hatred to that Word which was "ALL given by inspiration of God."

CHAPTER XXI.

THE THEORY OF A PLURALITY OF ORIGIN IN THE RACES OF MEN UNPHILOSOPHICAL.

Genuine science consists in the knowledge and application of relations; which relations, when once ascertained in the modes respectively proper to them, are not liable to be disturbed.—ISAAC TAYLOR.

True philosophy secures for each department of science the most absolute independence of every other within its proper limits.—ISAAC TAYLOR.

Inductive—that sound, and humble, and sober philosophy—will never consent to a principle of sure and authoritative guidance to be subverted by any difficulty.—CHALMERS.

THE theory of a plurality of species and of origin in the present races of men, we regard as unphilosophical, and contrary to right reason.

It is unphilosophical, because it builds a towering conclusion upon a narrow and insufficient foundation. The data necessary to form a just and proper conclusion are as yet few and partial. Even as it regards human skulls and bones, all the collections as yet made are very defective, while the osteology and physiology of the various races of animals has received scarcely any attention. To deduce a general and positive conclusion, therefore, from such data, is altogether premature and unwarrantable.*

The two extremes, also, of the human race are selected, to the absolute oversight of all the intermediate races by which these extremes are connected together, and from these isolated examples a general conclusion is drawn; whereas,

* See Dr Bachman, pp. 34 and 217.

no physiologist or naturalist is able to draw a line of demarcation between the different gradations, or to estimate the sum and effect of all as exemplified in the extremes.

Equally unphilosophical and narrow is it to draw a conclusion as to specific differences from varieties *in man*, as if he were the only animal in nature, and then to determine that differences which are found every day in *the same acknowledged species* of other animals, must be regarded as proofs of a *different species* among men. "All such distinctions," says Dr Goode, "are upon too narrow a scale, and perhaps too much dependent upon particular circumstances, for an admission into the lines of a broad and original demarcation;" and "some of the differences on which stress are laid are," adds Dr Goode, "so superficial, that we may, without descending to a pun, gravely assert them to be not more than *skin-deep*." *

This theory is, therefore, unphilosophical, because differences as great in reference to the shape of the skull, the size of the brain, and mental endowments, are found to exist among individuals and families of the same nation, as between the Caucasian and other races; † and because, to say the least, there are cases of many individuals among genuine negro tribes, whose characteristics in all these respects fully attain to *the standard* of the European man, and greatly excel *many* who belong to that race. ‡ A diversity in the same characters which are possessed in common, and in various degrees, by all the races, cannot prove *a difference*, but must determine a *unity* of species, especially when it is borne in mind that variety and not uniformity is the law of nature, and that it is also the law of nature to transmit and perpetuate such varieties when they are once originated. §

Genuine negro races are found not only in Africa but also in Australia, in Van Diemen's Land, in Polynesia, and else-

* See Dr Bachman, vol. ii., p. 92.

† See this admitted in Dr Morton's Inquiry, p. 11.

‡ Prichard, vol. iii., p. 187, and Goode, ii., p. 85.

§ See Prichard, vol. i., pp. 216, 241, 242.

where, and found, too, in commixture with other races.* It is therefore most unphilosophical to suppose that this race in Africa is of a different species, since it is more difficult to account for the spread and amalgamation of this race with the others, than to admit that they have all proceeded from an original stock, among whose branches this variety has arisen.

According to the present views of life, as held among physiologists, it is not a principle independent of the body, and by which the phenomena of life are governed, but is itself a property of matter, or the state of action peculiar to matter, when organized.† But if matter when organized has the power of preserving its existence as a perfect structure—if it is then able to counteract the ever-operating influence of chemical and physical laws, and to resist the injurious effect of external agencies, how can they who believe these things, so utterly opposed to all our conceptions of matter, doubt the power of this organization to adapt itself to varieties of condition, so as to produce all the differences we see, both among men and among the lower animals?

This theory is unphilosophical, because, while every thing in the condition and habits of men would lead us to expect among them greater diversities in form, structure, and endowments, than among the lower animals or plants, these variations are in reality far less in men than what have certainly taken place among other animals, in species unquestionably the same.

This theory is unphilosophical, further, because, while the races of some animals, which are believed to be of one species, have been as distinctly marked and as completely separated from the earliest periods to which historical evidence extends as they are now, the same difficulty in regard to the varieties of man—if, indeed, we have not removed it to a

* Fitzroy's Voyage, vol. iii., pp. 644, 645, and Russell's Polynesia, pp. 31, 43, 44.

† Todd's Cyclopedia of Anatomy and Physiology, p. 141, art. *Life.*

great extent—is made a ground for denying the unity of the human races, although in this case the causes of variation are incalculably greater than in the case of the lower animals. *

It is admitted that we cannot explain the method by which, according to any natural laws, the varieties among men or animals could have arisen. But the difficulty is not greater respecting man than other animals. "What there was," says Dr Bachman, "in climate or the constitution of the animal that first produced the short-legged otter sheep in New England, which has also recently originated in Great Britain from a flock of common sheep, no one can tell, but it has now become a permanent race. From the account given us in the Philosophical Transactions for 1813, by Col. Humphries, it appears that it is a small animal, weighing about forty-five pounds, with loose articulations, crooked forelegs, resembling those of the otter. Naturalists have given it the name of *Ovis Ancon*. So tenacious are its characteristics, that, when united with the common breed, the product resembles either one or the other of the original variety. How, again, we might ask, did the large dray-horse originate in Flanders from the common breed? We can only conjecture that several individuals of this variety appeared in that low country favourable to its production; these multiplied more rapidly than the original breeds, and finally gained the preponderance. The race, however, was formed and perpetuated. How has it happened that the deer in our swamps are long-legged, and those on the high land stouter and shorter-legged, and that in the Hunting Islands, between Savannah and Charleston, they are not one-half the size, and yet possess large horns, and that in these several localities all the other varieties have disappeared? Here there was no human intervention, yet the effect was produced by unknown natural causes. Why is it that the cattle in Opelousas, in Western Louisiana, have, without a change of stock, within the

* See Lawrence, p. 376.

last thirty years, produced a variety of immense size, with a peculiar form and enormous horns, like the cattle of Abyssinia?"

It is known that the most wonderful variations in height, form, and defects, have arisen among men, and that by intermarriage these might be perpetuated. "Let us then suppose," says Dr Lawrence,* "that the porcupine family had been exiled from human society, and been obliged to take up their abode in some solitary spot, or desert island. By matching with each other a race would have been produced, more widely different from us in external appearance than the negro. If they had been discovered at some remote period, our philosophers would have explained to us how soil, air, or climate, had produced so strange an organization; or would have demonstrated that they must have sprung from an originally different race; for how could they acknowledge such bristly beings for brothers? There is also a race of spotted men in Mexico, of whom Mr Poinsett saw a regiment of six hundred strong. And yet this race of men have originated in modern times. The effects, therefore, of some external causes acting upon the capacities of organized beings so as to produce great and permanent varieties, are before our eyes, in every country, and in regard both to man and other animals; and it is therefore most unphilosophical to make such diversities a foundation for original specific distinctions. Our ignorance on this point is analogous to that which exists respecting many other subjects; "for," says Locke,† "the workmanship of the all-wise and powerful God, in the great fabric of the universe, and every part thereof farther exceeds the capacity and comprehension of the most inquisitive and intelligent man, than the best contrivance of the most ingenious man doth the conceptions of the most ignorant of rational creatures."

The negro is by no means the lowest link in the chain of

* Lect. p. 307. See also, pp. 305, 308–310.

† Hum. Mind, b. iii., chap. vi. § 9.

humanity.* Suppose, however, he were. As man is an animal, he must in all his variations resemble animals; and this he must do in some one of his varieties more nearly than in all the rest. But does this prove that the variety in which this greater resemblance occurs, is less human than the others? It does not; unless we adopt the absurd logic which would argue, that since of all the varieties of swine the common pig more nearly resembles a horse than any of the others, therefore the common pig belongs to the species of horse, or ceases to be a pig.

This theory is unphilosophical, further, because it multiplies causes without necessity. From the wonderful diffusion of vegetables and other facts, Linnæus laid down the aphorism, that "in the beginning God created one pair only of every living species which has a diversity of sex." "I venture," says Sir William Jones, "to produce a shorter and closer argument in support of this doctrine. That nature, of which simplicity appears a distinguishing attribute, does nothing in vain, is a maxim of philosophy—and against those who deny maxims, we cannot dispute; but it is vain and superfluous to do by many means what may be done by fewer; and this is another axiom received into courts of judicature from the schools of philosophers. We must not therefore, says our great Newton, admit more causes of natural things, than those which are true, and sufficiently account for natural phenomena. But it is true, that one pair at least of every living species must at first have been created; and that one human pair was sufficient for the population of our globe in a period of no considerable length—on the very moderate supposition of lawyers and political arithmeticians, that every pair of ancestors left on an average two children, and each of them two more—is evident from the rapid increase of numbers in geometrical progression, so well known to those who have ever taken the trouble to sum a series of as many terms as they suppose generations of men in two or

* Lawrence, pp. 335-340, 384, 387, &c.

three thousand years. It follows that the Author of Nature (for all nature proclaims its Divine Author) created but one pair of our species; yet had it not been (among other reasons) for the devastations which history has recorded, of water and fire, wars, famine, and pestilence, this earth would not now have had room for its multiplied inhabitants." "Such then," says Prichard, "are the causes by which the varieties of men may be accounted for. Although I have acknowledged my entire ignorance of the manner in which these operate, I have proved that they exist, and have shown by copious analogies that they are sufficient to explain the phenomena. The tendency, under certain circumstances, to alterations of the original colour, form, and other properties of the body, and the law of transmission to the offspring, are the sources of varieties in man and animals, and thereby modify the species. Climate, food, way of life, in a word, all the physical and moral causes that surround us, act, indeed, powerfully on the individual, but do not change the offspring, except in the indirect manner just alluded to. We should, therefore, openly violate the rules of philosophizing, which direct us to assign the same causes for natural effects of the same kind, and not to admit more causes than are sufficient for explaining the phenomena, if we recurred, for the purpose of explaining the varieties in man, to supernatural causes."

Again, this theory is unphilosophical, because geology, which is a science founded on induction, admits, *and requires us to admit*, that it has been a part of the order of things that a divine and superhuman power should be exercised from time to time in securing the creation and destruction of successive races of organized and vegetable beings; and because, therefore, there is nothing contrary to the order of nature, if God thought it best, to produce all the present varieties of the human family from one original stock. And as we have shown that this is the teaching of Scripture, both historically and doctrinally, the whole force of that science of historical

criticism by which the truth, inspiration, and authority of the Bible are made undeniable, demand our faith in the single origin of all men, however unaccountable may be the means by which their existing diversities were brought about. To yield an implicit faith to this doctrine, therefore, is the dictate and requirement of true reason and sound philosophy; and to withhold it, is to substitute our own experience for the knowledge and testimony of God. On this point we are happy to adopt the language of Doctor and Professor Caldwell. "We are," says he, "the simple, unassuming Christian. We honestly state the differences of physical man as we find them, acknowledging our incompetency to explain them, and referring their production to the power of God. To that power we set no limits. We do not say that it must have operated in this way or in that—by secondary causes, or by its own proximate agency. It is enough for us to know that it has operated wisely, although in a way which we profess not to understand."

This theory is, therefore, unphilosophical, because, while it rejects all supernatural and miraculous causes, it actually multiplies the admitted necessity for such interpositions of Almighty power. In the theory of an original unity, it is believed that God, in creating the ancestral human pair, endowed human nature with the capacity of producing permanent varieties; whereas, on the theory of a diversity of races, a distinct and repeated creation by miraculous power is made necessary, not only to account for the original ancestors, but for every new variety which may be found to exist. "The creation of the first human pair," says Dr Bachman, "as well as that of all living animals and plants, it must be admitted by all who are not atheists, was a miraculous work of God. No combination of atoms, or any gradual elevation of lower animals into higher orders—according to the absurd theory of La Marck, who used arguments to show that the human race was derived from the monkey—could ever have produced man in any other way than by miraculous power.

If, then, other species of men had to be formed, suited to other climates, it would of course have required a similar miracle in this new creation. It is true, God was fully able to do this and infinitely more; but do we any where discover that he has ever resorted to these means, where the same results are known to be produced by stamping on the race already created a constitutional power to produce these permanent varieties? It must be observed, that it was not necessary to hurry these races into existence at an earlier day than that in which the different varieties progressively appeared and peopled the world. God might have created the first progenitors of our race millions of ages earlier than at the time when they actually appeared; and if he so constructed the human constitution that it would, by its own organization, be capable of producing varieties that were to become permanent in their characters, the effect would be produced by a natural process—varieties of men would be formed without a miracle. We all admit that the first pair of the cow, the horse, the sheep, the swine, was a miraculous creation; but if it was a part of their nature to produce the endless varieties which we daily meet with, then surely the production of these varieties is not miraculous, but a natural operation."*

This theory is unphilosophical, therefore, not only because it interferes with the established order and constancy of the laws of nature, in order to account for every variety among men by a fresh miraculous creation, but also because it destroys the *uniformity* of these laws, by making God create different species of men, who, by intermixture, are all to produce other species, when among all other animals no two distinct species have ever been found capable of propagating other species. Besides, these species, when thus created, have been found scattered abroad over portions of the earth to which they were not originally adapted, and there producing varieties even more striking than the original species; and thus we are required to believe that the differences

* See Dr Bachman, pp. 37, 38, 242, 249, 256, 257, 266, 272, 275.

among men could have arisen only from the supernatural power of God, and yet to believe, at the same time, that greater differences are the result of mere natural causes.*

This theory is further unphilosophical, because it not only argues from present effects, but also from the assumption that there were no causes in operation thousands of years ago but what exist now; whereas geology, as well as the analogy of all science, would lead us to the conclusion that there were then causes in operation not now acting, and by which "impressions meant to be permanent and characteristic were then more easily communicated and more indelibly stamped." †

This theory is unphilosophical, because it leads to absurdity; for, if the differences among the human race are specific and not accidental, then we are led to a multiplication of species wherever such differences are found. This would break up families, cities, and countries, into original and independent species, while they, nevertheless, bear every presumptive or certain proof of a common origin. ‡ Where, then, is the limit to be placed to the multiplication of human species? The number is incalculable, and beyond all scientific analysis. § All criteria of species are destroyed. Natural science is thrown into chaotic confusion, and all other sciences are to be undermined in order to sustain an infidel hypothesis.

But again, this theory is unphilosophical, because it is based exclusively upon the physical and external differences among men, and arbitrarily and most unscientifically excludes the ethnographic, the mental, the moral, the historical, the geographical, and the social condition of men, and the other

* See Dr Bachman, p. 39.

† Dr Wiseman pursues this argument; see pp. 144–147, and our previous authorities.

‡ See this argument well presented by Archbishop Sumner in Records of Creation, vol. i., pp. 372–377; Goode, vol. ii, pp. 76–78; Lawrence on Man, p. 166; Faber's Dissertations, pp. 289, 290. Geoffrey found in the catacombs of Paris specimens of every form of skull. See also Retzius, in Annales des Sciences for 1844, on the skulls of the Baltic people.

§ See admitted in the Ethnological Journal, p. 532.

grounds, *upon all of which combined* the determination of this question can alone be properly made.* This theory is therefore unphilosophical, because it excludes valid testimony in its decision of the case. Anatomy and physiology are not the only sciences, nor the phenomena presented to the observation of the senses the only facts in existence. There is a science of history, a science of geology, a science of ethnography, a science of zoology, a science of natural history, a science of intellectual and moral distinctions, and a science of religion; and, in rightly determining this question, THE FACTS AS WITNESSED TO BY EACH OF THESE SCIENCES MUST BE TAKEN INTO CONSIDERATION. Who are anatomists, and what is anatomy, that they should refuse to receive any testimony respecting matters to which testimony undoubtedly applies, from any other science than their own? The sciences are all peers of the realm of reason, and it will not be borne that one should lord it over any other. And when all other sciences—which are, to say the least, upon a par with anatomy—testify to the original unity of the human race, it is preposterously absurd for it to assume the tone of a dictator, and command silence and passive acquiescence in its dictum.

"The logic of modern philosophy," says Isaac Taylor, "I mean *true* philosophy, secures for each separate department of science the most absolute independence of every other, within its proper limits. To the operation of this very law is to be attributed that remarkable intercommunity, accordance, and harmony of purpose, which characterize and authenticate the philosophy of the nineteenth century. No such harmony has heretofore been seen, except when enforced by tyranny. There have, indeed, been times when Aristotle and the Pope have kept the peace in the world of mind by declaring that so and so could not be true, and must not be taught. But these times have gone by, unless, indeed, the new philosophy is to revive a similar despotism." This question, then, of the unity of the races, can never be determined by any one

* See this admitted in Dr Morton's Crania Americana, p. 4.

science. They who put forward such claims, transcend their limits and those of a just philosophy. It is a rule, "Auctoris aliud agentis parva auctoritas"—"the authority of an author is not to be pleaded on points beyond his capacity and province." Of such, Lord Bacon's remark is often true, that they are ill discoverers who think there is no land when they can see nothing but sea. We are not unwilling to submit this subject to the decision of men of science IN ALL THE BRANCHES BEARING UPON IT. But we cannot leave it in the hands of the medical profession, and to their exclusive determination. "The doctrine of the unity of the plurality of the races," to use the language of Dr Bachman, "is not an indispensable part of medical education. Our professors of surgery and anatomy are not necessarily expected to be naturalists. Even the celebrated Owen, the most eminent of comparative anatomists, while he gave the most careful dissections, and pointed out those anatomical differences by which genera and species either approached to or departed from each other, seldom ventured either on naming or describing a species. Anatomy and physiology are only branches of a science which the naturalist is obliged to study; and he accordingly, after giving the aid which his department could afford, left the designation of species, especially of recent animals, to the naturalists, to whom it more legitimately belonged. Among our physicians, not one in a thousand has devoted himself to any branch of natural science; nor can we conceive that this, although desirable, is positively essential to his profession. The legitimate duty of the professor is to impart instruction in regard to the anatomical and physiological organization of man, and to point out all those variations which are found to exist in individuals or races. How far the doctrine of the plurality in the races is openly taught in any medical school in America, we are not prepared to state; but we have no hesitation in saying, that if, in the present stage of our knowledge on this subject, and the scanty materials we have now on hand in our country, such an attempt,

even by insinuation, or in whatever way it may be disguised, should be made, it would be foreign from the humility and modesty which are the characteristics of true science; and more especially since nearly the whole of the Christian world regard this as a grave subject, in which higher and immeasurably greater interests are involved. Favourable as we have ever been to the fullest investigations in science, and unwilling as we are to shackle the human mind, we are, nevertheless, not insensible to the fact, that errors in science imparted to the naturally sceptical minds of the young, exercise an important influence on the conduct and happiness of after life. The American mind thus far is cast in a religious mould; public sentiment, as at present constituted, when led to suppose that any of its institutions are undermining the foundation of higher hopes, may be compared to the ripples of the sea acting with slow but sleepless force on the base of a pyramid, which will gradually be worn away with every returning wave, until the foundation can no longer support the superstructure, and it is at last prostrated to the earth by a breath of air, although it may have been as firmly planted as the pillars of Hercules."

"Of what conceivable use or value," says Dr Wardlaw,* "are all the investigations and reasonings of philosophy, if not for the ascertaining of truth? And in order to arrive at truth, is it not the proper business and the imperative duty of the philosopher to leave no quarter unexplored, where evidence of any description can be found—nothing whatsoever unexamined that promises to throw even a single ray of light on the subject of his inquiry—one solitary beam on his path that may contribute to guide him to a right result? Can any thing be more irrational, more unworthy of a mind that is really honest, and in earnest in its desires after truth, than for him who professes to be in pursuit of it to allege, respecting any source of information or department of evi-

* Christian Ethics, 3d. ed., Lond. 1837, pp. 11, 12. We urge the study of the entire first lecture on the Province of Philosophy and Theology.

dence, that he has nothing to do with it? No man of sound principle and enlightened judgment will ever sit down satisfied with a conclusion which he knows to have been formed on a partial investigation, or so long as there remains unexamined any accessible quarter whence such information or proof may be derived as may possibly shake its stability—nay, for aught he knows, may even demonstrate its fallacy, and constrain its rejection. Every thing, without exception, should be regarded as pertaining to the province of the genuine philosopher, that holds out any promise of conducting him to truth.

"The application of these general principles will be already apparent. In the Bible, we possess a document, by whose contents a great variety both of facts and sentiments are materially affected. It professes to be of the remotest antiquity, and of the very highest authority. Suppose, then, that by his own process of argumentation, a philosopher has arrived at a particular conclusion respecting the truth or falsehood of some fact or opinion. You say to him—'I find something very different from your conclusion in the statements of this book.' He answers, with all imaginable coolness—'It may be so; that does not come within my legitimate range; it belongs to the province of the divine. It is his business, the best way he can, to make out the consistency of the statements of the Bible with the decisions of philosophy. If there be a discrepancy, it is unfortunate; but I cannot help it: the harmonizing of the two lies not with me, but with him.' But why so? What good reason is there why the *onus* of finding a principle of reconciliation should be made to rest entirely on the theologian? We cannot consent to this. We cannot quiescently permit philosophy to assume so lofty a bearing; to take her own decisions for granted, and with the port and tone of a self-sufficient superciliousness, leave the divine to make what he can of their inconsistency with his Bible. We cannot allow the authority of this document to be thus unceremoniously left out of the account. We insist

upon it, that on every point respecting which it delivers a testimony, the proofs of its authority, or of its want of authority, are amongst the evidences on that point which every lover of truth—that is, every true philosopher—should feel himself under imperative obligation carefully to examine. As the philosophy is of no sterling worth that conducts not to truth, if the authority of the document can be established, and the verity of its statements consequently ascertained, then it becomes, on all matters of which it treats, *the only philosophy;* unless we are determined to dignify with this honourable appellation a system of falsehood. If any man is prepared to avow, that he would prefer a falsehood, as the result of *one* process of inquiry, to truth, when ascertained by another, then may he consistently leave out of his investigations the evidences on which the claims of this document rest. But should we call such a man a philosopher? It were a miserable misnomer; inasmuch as no procedure could be more thoroughly unphilosophical than to refuse any light, be it what it may, that promises to conduct to what is the sole end of all rational inquiry."

CHAPTER XXII.

THE THEORY OF A PLURALITY OF ORIGIN IN THE RACES OF MEN UNCHARITABLE.

Thus deeply rooted in the innermost nature of man, and even enjoined upon him by his highest tendencies, the recognition of the bond of humanity becomes one of the noblest leading principles in the history of mankind.—HUMBOLDT.

There is neither Jew nor Greek, there is neither bond nor free, there is neither male nor female: for ye are all one in Christ Jesus.—EPISTLE TO THE GALATIANS.

BUT the theory of a diversity of original races in the human family is uncharitable as well as unphilosophical. It is contrary to that universal love prescribed by Christianity, and enforced by reason. This charity gives the benefit of a doubt even to the accused and guilty, and always leans to the side of mercy, and the claims of the poor and the helpless. Instead of debruting, it would exalt; and instead of asking, "Am I my brother's keeper?" it would see in every man the image of God and the features of a brother.

There are but two motives assigned by Dr Lawrence for the adoption of this theory (as he himself calls it) of Voltaire —"the fear of being allied to the monkey tribe, or the wish to degrade the African below the standard of the human species in order to justify his barbarous and unjust treatment;" and Christian men "ought to be the last to subject their institutions to imputations so deeply injurious to humanity, so atrocious, and to impiety so blasphemous."

"Whilst, therefore," to use the words of Humboldt, "we maintain the unity of the human species, we at the same time

repel the depressing assumption of superior and inferior races of men. There are nations more susceptible of cultivation, more highly civilized, more ennobled by mental culture than others, but none in themselves nobler than others. If we should indicate an idea which, throughout the whole course of history, has ever more and more widely extended its empire, or which more than any other testifies to the much contested and still more decidedly misunderstood perfectibility of the whole human race, it is that of establishing our common humanity—of striving to remove the barriers which prejudice and limited views of every kind have erected amongst men—and to treat all mankind, without reference to religion, nation, or colour, as one fraternity, one great community. Thus deeply rooted in the innermost nature of man, and even enjoined upon him by his highest tendencies, the recognition of the bond of humanity becomes one of the noblest leading principles in the history of mankind."*

Christianity alone can properly adapt the feelings of the heart to the varying characters and condition of our fellow-men, and constrain us, in whatsoever state they are, to "render unto them things just and equal," to "do unto them as we might rightly expect them to do unto us were our relations changed;" and thus to lose that "secret uneasiness, which would threaten to grow unto disgust" in beholding the stupidity and barbarism of the tropical man, "in pity still more profound, and in the charity of a Christian heart."†

"In 1846," says Dr Merle d'Aubigné, after the Evangelical Alliance had closed its sittings in London, "I left the baths of Albisbrun, and went into the Grisons to see some friends. On the steamboat of the lake of Zurich, I found myself in the midst of a crowd of strangers, but I soon noticed two persons whom I took to be Quakers. I believed that there would be, doubtless, between them and me some points of friendly relation. I addressed them, and soon found in them two Christians—sincere, enlightened, lovely. We

* Humboldt's Cosmos, pp. 368, 369. † See Guyot, pp. 230, 231.

travelled together two or three days, and we enjoyed all that time true Christian union. I remember well the moment of our parting. We were on the mountain not far from the ancient and beautiful convent of Pfeffers. To the right, the path descended towards the Grisons and the Via Mala. To the left, a road opened towards the Tyrol. My course was along the first; my friends were to take the other. We were in the deep gully of a ravine. A mountain stream falling behind us, crossed our road, and then made a second fall immediately below. Some boulders of rock, rolled together without order, formed a sort of bridge. We were seated on these stones; one of these Friends, who had been an advocate, and was now a minister in his community, grasped my hand at the moment when we were about to part, and, without saying a word, knelt down on one of the fragments of rock. I knelt down beside him. After some moments of profound silence, during which no sound was heard but the calm and majestic fall of the waters, my friend began to pour forth his soul unto God. He prayed for me as if he had been one of my oldest friends, or my own brother. I had unfolded to him some of the wounds of my own heart; he asked the Lord to heal them. I have seldom enjoyed an hour of such entire Christian union. We rose, and parted." Such is the magnetic power of true Christian love, when once shed abroad in the heart.

In a visit paid to the missionary stations of South Africa, a few years ago, by Mr Backhouse, one of the Society of Friends, he came to the Bassuto country. That excellent missionary, Mr Moffat, had travelled to this part in former times, and had awakened a spirit of hearing among the people; but it was then occupied by a French Protestant missionary, who had been the means of doing much good among the people of Moshesh, a celebrated chief of this country.

When the people were assembled, with some neighbouring chiefs, among whom was his own father, Moshesh ad-

dressed them in the following words:—"Rejoice, ye Mocare and Mocatchani! ye rulers of cities, rejoice! We have all reason to rejoice, on account of the news we have heard. There are a great many sayings among men; and some are true, and some are false: but the false have remained with us, and multiplied. We ought, therefore, carefully to pick up the truths we hear, lest they should be lost in the refuse of lies. We are told that we have all been created by one Being, and that we all sprang from one man. Sin entered into man's heart when he ate the forbidden fruit, and we have all got sin from him. These men say that they have sinned; and what is sin in them is sin in us, because we came from one stock; and their hearts and ours are one thing."

To give one further illustration. There were two heads of African tribes, one of whom was named Kama, a chief among the Caffres; and the other Morocco, who was a Bechuana chief. A missionary went to Kama, and settled among his people; another Christian teacher went to the tribe of which Morocco was the chief. Some years passed away, when it so happened that these two Africans came to the same place to sleep, at a distance from their homes. When Morocco heard that his enemy was in the house where he was to rest for the night, he did not like at first to enter the doors; but as evening came on, he went in with his attendants, and set himself on the opposite side of the room to that where the other chief had placed himself. For some time they looked at each other in silence. At last the Caffre chief thought, "Why should I be silent when I have found the mercy of God, and I have nothing but love in my heart to all mankind?" He then said to Morocco, "Do you know the reason why you and I have met together in peace in this room?—you have left your spear at home, and I have left mine; and we are now sitting together as friends in the same room?" Morocco said, "No, I cannot tell the reason; but it is true you are sitting there, and I am sitting here, and we are sitting as friends." Kama then said, "The reason is this: the missionaries have come

into our country with the Word of God. And that Word teaches us, that although we may differ from each other in colour and language, and may live in different countries, yet we are of one blood, and are fallen into sin. But there is one Saviour who died for us all, and one way of salvation, and one Spirit to teach us that way, when the Word is preached. This Word has been preached to us Caffres; and much as we loved fighting before, we see now it is a bad thing, and we have left it off. The Word of God has conquered our hearts, and we are now at peace. If it had not been for this Word, our meeting to-day would have been very ugly indeed: either your spear would have come into my heart, or mine might have gone into your heart; one of us must have fallen." They then took off the rings from their arms, and exchanged them in token of peace and friendship. After this, they shook hands, and joined in prayer together; and were greatly delighted in talking about the great change which the gospel had made, in stopping war and bloodshed, and in producing peace and joy.

At another time, some Caffre chiefs thus spoke to some missionaries, who had gone among them at the risk of their lives to lead them to be at peace:—"The object of your visit is good—it is worthy of the children of God; yea, it is very good—so good, that it is a wonder you never thought upon it before. War never did, and never can, make a country right. We thank, we greatly thank; we have not words to thank enough."

In another part of the world, the warriors took the handles of their spears, and made of them the rails which guarded the stairs leading up to the pulpit in the house of God.

Thus, when Jesus was born the angels sang, "Glory to God in the highest, on earth peace, good will towards men;" and wherever the gospel is known, it teaches lessons of love and mercy. It tells of peace with God through our Lord Jesus Christ, and that this was obtained by his death on the cross to take away our sins.

Of such illustrations of the attractive and uniting influence of the religion of Christ, we might present innumerable instances. In such expressions of feeling—of their joy in laughter, and their sympathy in tears—and which are common to all colours, races, and communities of mankind, civilized or savage—we have proofs of identity stronger than all reasoning.

To our great poet, whose philosophy alone would have made him immortal, even had it not been conveyed in immortal verse, we owe a line, which far more happily expresses our meaning:—

"One touch of nature makes the whole world kin."

It is this "one touch of nature," testified in tears and other expressions of sympathy, which decides the question of the unity of the human species to the common feeling of mankind, as assuredly as the other proofs commend it to the observation of the naturalist, or the reasonings of the philosopher.*

And as the apostle employs the doctrine of the unity of the human races as an argument for the manifold wisdom of God, as displayed in the diversity of men adapted to all conditions and situations, let us by faith receive and apply it, for the confidence of our own hearts in his goodness and wisdom. Above all, let it work in us that charity towards all men of which Christ is the exemplar, and his gospel the spirit, the message, and the source. In Christ Jesus all men find their centre, as the Saviour and the representative of all. "And truly," to use the eloquent words of Dr Wiseman, † "when we see how He can have been followed by the Greek, though a founder of none among his sects—revered by the Brahmin, though preached unto him by men of the fishermen's caste—worshipped by the red man of Canada, though belonging to the hated pale race—we cannot but consider

* London Quarterly Review, Jan., 1850.

† Lectures, p. 155. See the powerful argument for the divine origin of Christianity, from the character of Christ, pp. 154, 155.

Him as destined to break down all distinction of colour, and shape, and countenance, and habits; to form in Himself the type of unity to which are referable all the sons of Adam; and give us, in the possibility of this moral convergence, the strongest proof that the human species, however varied, is essentially one."

"All the nations of the earth," adds Guyot,* "must unite together in spirit by the bonds of the same faith, under the law of the same God. This is the lofty goal to which henceforth all human societies ought to aim. The world hears the unity and brotherhood of all human kind proclaimed, without distinction of nation or of race—the true principle of humanity. This is the leaven that is to leaven the whole lump; it is upon this new basis that humanity, recommencing its task, goes on to build a new edifice."

"The privileged races have duties to perform proportioned to the gifts they possess. To impart to other nations the advantages which constitute their own glory, is the only way of legitimating the possession of them. We owe to the inferior races the blessings and the comforts of civilization; we owe them the intellectual development of which they are capable; above all, we owe them the gospel, which is our glory, and will be their salvation; and, if we neglect to help them to partake in all these blessings, God will some time call us to a strict account."

"In this way alone will the inferior races be able to come forth from the state of torpor and debasement into which they are plunged, and live the active life of the higher races. Then shall commence, or rather rise to its just proportions, the elaboration of the material wealth of the tropical regions for the benefit of the whole world. The nations of the lower races, associated like brothers with the civilized man of the ancient Christian societies, and directed by his intelligent activity, will be the chief instruments. The whole world, so turned to use by man, will fulfil its destiny."

* Guyot, pp. 243-245.

"It is in this great union, foretold alike by the order of nature and by the gospel, humanity will have its special functions, and that we shall find the solution and the definitive aim of all the physical and historical contrasts which we have been studying. Every thing in nature is arranged for the accomplishment by man of the admirable designs of Providence for the triumph of the good; and, if man were faithful to his destination, the whole world would appear as a sublime concert of nature, all the nations blending their voices into a lofty harmony in praise of the Creator." *

* Guyot, pp. 280, 306, 308. Hamilton Smith is also of opinion that there are present changes "evolving the mysterious problem of human fusion into one great family, led by one religious system, trained to the sciences and literature of Europe."—P. 218.

APPENDIX, No. I.

CHAPTER I.

ON THE FORMER CIVILIZATION OF BLACK RACES OF MEN.

Homo unus creatus, est—ob pacem hominum, ne quis se præstantiore patre genitum gloriaretur; ad hæc, ne quis Epicureus ansam multorum Deorum asserendorum, haberet; denique, ad indicandum Dei eminentiam. Nam homo quidem uno ab annulo, licet multa nonnisi consimilia signa exprimit, at ille rex regum Sanctus B. omnium hominum formas, a primi typo expressit, ita tamen ut nemo unus alteri consimilis reperiatur.—SANHEDRIN, iv. 5.

The negro, like the white man, is still God's image, although carved in ebony.—DR GOODE.

Homo sum, humani nihil a me alienum puto.—TERENCE.

"ACCORDING to various authors," say the writers of the Universal History, "the proper ancient Ethiopians were, for the most part, perfectly black, as we find their posterity at this day, though some particular cantons were white, called by Pliny white Ethiopians. It is probable they were pleased with their national colour, and preferred it to those of other nations. Some writers affirm that the children of the present Abyssinians are terrified at the sight of an European, as much as ours at the sight of a negro; and that they paint the devil white, in order to ridicule all complexions of, or bordering upon, that colour."

Dr Morton, speaking of the mutual repugnance of different races, adds: "Not only is this repugnance proverbial among

all nations of the European stock among whom negroes have been introduced, but it appears to be equally natural to the Africans in their own country, towards such Europeans as have been thrown among them; for with the former a white skin is not more admired than a black one is with us." This variety of taste in regard to man, to woman, and to every thing else, is sufficient to dispel the illusive prejudice, founded merely upon national features, habits, and preferences; and we may therefore, as philosophical inquirers seeking after truth, admit the full force of any facts which may encourage the belief that there was a time when the black race of men were the pioneers, or at least the equals, of any other races in all the arts and acquirements of man's primitive civilization. The former civilization of black races of men is a question very pertinent to their unity in origin and in essential capacity with the white races. As such, it was discussed in the body of the previous edition of this work. Since, however, it is a question which, while it is very interesting in itself, is not essential to the argument, as it may or may not be introduced without affecting the cumulated effect of that argument, and as it is a point about which there will be a great difference of opinion, the chapters bearing on this subject are now thrown into an Appendix.

Abelfuera records a tradition of the Armenians, that Noah, in his distribution of the earth, gave the region of the blacks to Ham.

This family of Ham, in which Satan first raised the standard of rebellion, was distinguished also by its sagacity and advancement in all worldly knowledge and science. The Africans, therefore, as a branch of this family, could not at once fall into their subsequently degraded condition. Like the other branches of the Ammonian or Ham race, they were once, we believe, famous for comparative wisdom, power, and science. In support of this opinion we offer the following observations.*

* See Triplicity, p. 301; Bryant's Ancient Mythology, vol. v., pp. 260–262.

In many parts of the East, particularly in Japan, there are stupendous and magnificent temples of very remote antiquity, in which the idols are represented as negroes with woolly hair, though the present inhabitants of those regions are straight-haired; and what is very remarkable, among the Japanese, whose records are of the highest antiquity, black is a colour of good omen. Among the Siamese, also, their chief deities, called Buddha and Amida, are figured nearly like negroes.*

Among the Egyptians, Osiris, one of their principal deities, is frequently represented black.† Bubastis, also, the Diana of Greece, and a member of the great Egyptian Triad, is now to be seen in the British Museum, sculptured in black basalt sitting figures.‡ Among the Hindus, Kali, the consort of Siva, one of their great Triad; Crishna, the eighth incarnation of Vishnu; and Vishnu also himself, the second of the Trimerti or Hindu Triad, are represented of a black colour.§

According to Norden, Volney, Denon, and others, the great Sphinx at Gizeh, and many other ancient works of Egyptian art, had prominent jaws, thick lips, a broad flattened nose, and projecting eyes; to account for which, Dr Morton supposes the Sphinx may have been the shrine of the negro population of Egypt,|| who, as a people, were unquestionably under our average size.¶

The Buddhists of Asia, comprising three hundred millions of mankind, represent their principal deity Buddha with negro features and hair. Captain Colin Mackenzie has described a statue of Buddha in an ancient temple at Villigam, on the coast of Ceylon, of which he says that "the counte-

* See Ambassades Memorables de la Companie des Indes Orientales des Provinces Uniés vers les Empereurs du Japan. Amst. 1680, and Kæmpfer.

† Wilkinson's Egypt, vol. iii., p. 340; and Maurice's Indian Antiquities, vol. iii., pp. 223, 276, 280.

‡ Coleman's Mythology of the Hindus, 4to, p. 91. Do. Sir Wm. Jones, vol. iii., p. 377. Coleman, p. 11.

§ Asiatic Researches, vol. vi., pp. 536, 448.

|| Crania Americana, p. 29. See Dr Lawrence's Lectures on Man, p. 232.

¶ Ethnological Journal, ix., 391.

nance is full and mild, and the top of the head painted to represent the hair in several small curls of a black colour." In another paper, by Lieutenant Mahoney, on the remains of sculpture in Ceylon, an image of Buddha, at Calanee, near Columbo, is compared with one at Boodh Gya, in the province of Bahar, in Hindustan. It is observed that "both these statues agree in having crisped hair and long pendent ear-rings." *

"In the plains of India," says Hamilton Smith, "are Nagpoor, and a ruined city, without name, at the gates of Benares (perhaps the real Kasi of tradition), once adorned with statues of a woolly-haired race." †

It has been observed by several writers who have described the celebrated cavern in the Isle of Elephanta (whose sculptures display the oldest form of the Indian religion—that of the Smartal Brahmins—since the attributes of the three persons of the Triad are there exhibited as united in one figure), that the Hindu gods there figured have African features. Dr T. B. Hamilton, well known as a physician of great learning and judgment, whose works have contributed much to extend our knowledge of the races of people in India and the adjoining countries, says, that when he visited the cave of Elephanta, although then unacquainted with the controversies concerning the origin of the sculptures which it contains, he was struck with the African appearance of their images, particularly of their hair and features. ‡ Mr Seymour, in his "Pilgrimage to Rome," gives an account of certain images of our Saviour now at Rome, which were brought from Africa in the early age of the church, and which are perfectly black and of a negro cast. §

Now, it is evident that these edifices, idols, and statues were the works of a race analogous to the negro; for it

* Heber's Narrative, vol. i., p. 254, Am. ed. Prichard's Researches, vol. iii., p. 229.

† Natural History of the Human Species, pp. 209, 214, 217.

‡ Prichard's Researches, vol. iii., p. 229. Hunter in Archæologia, vol. vii.

§ See App., pp. 374, 375.

would be absurd to suppose that a people of a fairer complexion would have so greatly honoured a caste to which they did not belong. They were undoubtedly the Indo-Cuthites, the descendants of Ham, the aboriginal type of the black races of men, and of the Ethiopians, whose migrations extended from the rising to the setting sun. Sir William Jones, therefore, observes, "that the remains of architecture and sculpture in India seem to prove an early connection between that country and Africa."* He adds, "The pyramids of Egypt, the colossal statues described by Pausanias and others, the Sphinx, and the Hermes Canis, which last bears a strong resemblance to the Varaha Avatar, indicate the style of the same indefatigable workmen who formed the vast excavations of Canarah, the various temples and images of Buddha, and the idols which are continually dug up at Gaya, or in its vicinity. These and other indubitable facts may induce no ill-grounded opinion, that Ethiopia and Hindustan were peopled or colonized by the same extraordinary race; in confirmation of which it may be added, that the mountaineers of Bengal and Benhar can hardly be distinguished in some of their features, particularly in their lips and noses, from the modern Abyssinians." †

Hamilton Smith fully adopts the opinion that the negro or woolly-haired type of man was the most ancient, and the original character of the inhabitants of Asia as far north as the lower ranges of the Himalaya mountains, and presents at length many curious facts, which cannot, he believes, be otherwise explained.

"In this view, the first migrations of the negro stock, coasting westward by catamarans, or in wretched canoes, and skirting Southwestern Asia, may synchronize with the earliest appearance of the negro tribes of Eastern Africa, and just precede the more mixed races, which, like the Ethiopians of

* Works, vol. iii., Disc. 3d, on the Hindoos.

† The third Discourse of the Hindus, in Works, vol. iii.; and Asiatic Researches, vol. i., p. 427; and Martin's Nat. Hist. of Man, p. 261, &c.

Asia, passed the Red Sea at the Straits of Bab-el-Mandel, ascended the Nile, or crossed that river to the west." *

"Taking the whole southern portion of Asia westward to Arabia, this conjecture—which likewise was a conclusion drawn, after patient research, by the late Sir T. Stamford Raffles—accounts, more satisfactorily than any other, for the Oriental habits, ideas, traditions, and words, which can be traced among several of the present African tribes and in the South Sea Islands. Traces of this black race are still found along the Himalaya range from the Indus to Indo-China, and the Malay peninsula, and in a mixed form all through the southern states to Ceylon." † The Malays, also, Hamilton Smith considers as an adulteration of the woolly-haired negro stock in connection with the Caucasian stock. ‡

The attention of the reader will now be invited to some further developments of primeval antiquity bearing on this point.

According to writers of great learning and research, the aborigines of Hindustan were a race of negroes, or were, in hair and features, certainly analogous to them. § Such a race is found in islands in the Bay of Bengal, and in the interior of the Malayan peninsula; and "it is therefore," says Prichard, "an established fact, that a black and woolly-haired race is among the original inhabitants of Asia, and of countries not far from India." ||

"A remote idolatry," says Hamilton Smith, "of Papuan ori-

* "It shows," says he, "a more ancient date of existence than any others." (See Nat. Hist. of Hum. Species, p. 126.) This he bases upon physiological and other arguments, see pp. 131, 188, and 200. Dr Morton attributes the same opinion to some philosophers in his Crania Americana, p. 90, as it is known to have existed for 3445 years, or 730 years after Noah, while the earliest notice of the white races is B. C. 2200, during the 12th Egyptian dynasty. See Pickering's Races of Man, pp. 370.

† Prichard's Natural History of the Human Species, pp. 209–215. See also from pp. 189–209.

‡ Ibid., p. 217.

§ Prichard, vol. ii., p. 228, and Guyot, &c., as above.

|| Prichard, vol. ii., and Ritter and Trail there quoted, pp. 231, 232.

gin, can still be traced in parts of India, and sovereign families even claim descent from monkey gods, that is, from primeval Bheels; but the worship has changed to Brahmanism, and the ruling dynasties are now of high-cast Caucasian."

Hamilton Smith—in allowing, as we have seen he does, only three primitive types of humanity—in order to produce the intermediate varieties, is of course obliged to admit the great modifying power of circumstances over organizations.

Father Lewis de Froes, therefore, speaking of the idols in the temple of Amida, at Maeco, very properly characterizes them as Ethiopians: "Et circa statuam Amidae saltantes Æthiopas;" for the Ethiopians—who were so called, not so much from their complexion, as from the title of their Ophite deity—embraced, as we have seen, a very large portion of mankind, of various shades of colour, from the tawny to the black, from the straight-haired to the woolly. We have thus found Herodotus * speaking of the straight-haired Ethiopians; while, at the same time, he instances the negro caste of the same race in the inhabitants of the Colchic region, at the foot of Mount Caucasus, upon the Pontus Euxinus; of whom he says, "They are black-skinned and woolly-haired." † Now, these people were famous in very remote times for their high civilization, and the perfection of their manufactures, particularly of linen, on which account the same historian pays them, in conjunction with the Egyptians, the extravagant compliment of calling them the only possessors of that art.

Dr Wiseman has also shown that both Aristotle and Herodotus describe the Egyptians—to whom Homer, Lycurgus, Solon, Pythagoras, and Plato resorted for wisdom—as having the black skin, the crooked legs, the distorted feet, and the woolly hair of the negro; from which I do not wish, or feel it necessary, to infer that the Egyptians were negroes—but *first*, that the ideas of degradation and *not-human*, associated with the dark-coloured African races of people *now*,

* L. 7, c. 70. † 2 Chap., 104, 105.

were not attached to them at an early period of their history; and *secondly*, that while depicted as negroes, the Egyptians were regarded by these profound ancients—the one a naturalist, and the other a historian—as one of the branches of the human family, and as identified with a nation of whose descent from Ham there is no question.*

The truth, however, seems to be that the most ancient Egyptians really did possess more or less of the peculiar characteristics of the negro race. Pharaoh's daughter, the bride of King Solomon, speaks very emphatically of her own blackness of complexion.† There is evidence also that Theothmosis IV., of the 8th dynasty, selected a negress for his queen. In their paintings they represented the whites waiting as slaves, while the negroes, on the contrary, are depicted chiefly as connected with the military campaigns of this dynasty.‡ Dr Prichard has brought together, with great learning and industry, all the *ancient* testimonies that can illustrate this question, and has examined and collated them so carefully, that nothing further can be expected from this quarter. The results are thus summed up: "We may consider the general results of the facts which we can collect concerning the physical characters of the ancient Egyptians to be this, that the national configuration prevailing in the

* See Dr Wiseman's Lectures on the Connection between Science and Revealed Religion, Am. ed., pp. 95, 98. Volney assumes this as an undoubted fact. Travels in Syria, ch. ii. See in Lawrence, p. 239. Bruce was of the same opinion. See Lawrence, p. 235. See Lucian, Æschylus, and Ammianus Marcellinus, quoted by Prichard in Nat. Hist. of Man, pp. 152, 153; and by Lawrence, pp. 232, 237, where he quotes also Blumenbach.

† *Black*, literally "the dusk" of the morning—"as the tents of Kedar," which were made of black goats' hair, or dyed black. This she attributes to the effects of the sun. She repeats the declaration in very strong language, saying, "I am very black," "Prorsus vel valde et tota nigra." Markius Michaelis, Gill and Heb. in Ps. xlv. 5. Prov. viii. 31. See Williams on the Song of Songs, pp. 164, 167. "It has been found difficult," he says, "to explain *literally*, and no less so to apply *figuratively*."

‡ Pickering on the Races of Man, p. 195. He says there is no earlier representation of negroes, nor any evidence to show that *negro* slavery is not of modern origin. Do., p. 186.

most ancient times was nearly the negro form with woolly hair; but that in a later age this character had become considerably modified and changed, and that a part of the population of Egypt resembled the modern Hindus. The general complexion was black, or at least a very dusky hue." In this work, the most extensive and learned researches are employed to prove further the affinity between the ancient Egyptians and the Indians; and to show that both were marked by the characteristics of the negro race.*

There are also many marks of relationship between the Egyptians and the natives of central Africa.† "In their complexion," says Prichard, "and in their physical peculiarities, the Egyptians were an African race. In the eastern, and even in the central parts of Africa, we trace the existence of various tribes in physical characters nearly resembling the Egyptians; and it would not be difficult to observe a gradual deviation, among many nations of that continent, from the physical type of the Egyptian, to the strongly-marked character of the negro, and that without any very decided break or interruption. The Egyptian language, also, in the great leading principles of its grammatical construction, bears much greater analogy to the idioms of Africa than to those prevalent among the people of other regions." Speaking of the language of Egypt, Mr Latham says,‡ "The real affinities are those which its geographical situation indicates, viz. with the Berber, Nubian, and Gallathogues, and through them with the African languages altogether, negro and non-negro." Again, says Prichard, "there were in other respects, in the physical type of that race, many tokens of relationship to the people of Africa. The puffed and full countenance, the full cheeks, thick turned-out lips, the peculiar shape of the mouth

* See his Researches, pp. 158, 159; his Natural History of Man; and his Work on Egyptian Mythology, which is devoted to this inquiry. See also Martin's Nat. Hist. of Man and Monkeys, pp. 241–245.

† Prichard's Natural History of Man, p. 138. See Denon, p. 152, who says they display "the general African character."

‡ P. 510.

and eyes, the coppery and dusky complexion, approaching in individuals to black, in others to red, like the colour of the Fulahs, and only a few shades lighter than that of the Berberins, are instances of this resemblance.

"The weight and density of some Ethiopian skulls, and the projection of the alveolar process, and the peculiar shape of the legs and flattened feet, must also be taken into account. In estimating the whole amount of evidence indicative of African relations, we must further take into view many circumstances connected with the moral habits, the singular superstitions, and the general laws governing the structure of language, common to the Ethiopians, and many other nations of the same continent."*

Dr Morton has found, among one hundred skulls sent to him by Mr Gliddon from the tombs of Abydos, Thebes, Memphis, &c., forty-nine of what he terms the Egyptian race, that is, having a narrow and receding forehead, prominent face, and smaller facial angle; twenty-nine Pelasgic; six Semitic; eight negroid, or in which the negro conformation predominates; one negro, and two denominated idiot. Now, these tombs, be it remembered, were the receptacles only of wealthy individuals—the aristocracy of Egypt, and exhibit, therefore, the very best development of the Egyptian form and features. It is also to be borne in mind, that Lepsius admits that the veritable remains of primeval Egyptians are now but very partially found to exist, having been displaced by the Hykshos, the Persians, the Greeks, the Romans, and the Saracens, and that no primitive Egyptian crania remain, older than Psammeticus (B.C. 550). The mummies, therefore, that are now found, may have been partly of Greek, and other comparatively modern inhabitants of Egypt.† And

* He says the Ethiopians were black—Researches, vol. ii., p. 24; and that they were kindred tribes of the same original stock as the Egyptians. —P. 245.

† Few of the mummies, says Dr Pickering, yet discovered are older than the Greek-Egyptian period, commencing B.C. 650. Even Lepsius

yet, notwithstanding all these admissions, about sixty out of one hundred were more or less of negro conformation; while out of seventeen others, subsequently procured by him, Dr Morton finds eleven of the Egyptian form, two with traces of negro lineage, one of negroid form, two Pelasgic, and one Semitic; that is, of these seventeen, which he regards as very probably old and genuine, fourteen are more or less conformed to the lower races of man.*

himself is charged by a writer in the *Athenæum* with wilful destruction of Egyptian monuments, for the sinister purpose of aiding his chronology. "Such is the case," says this writer, "with the delegate of the King of Prussia, Prof. Lepsius, of Berlin. Nevertheless, in his late visit to Egypt, he scrupled not to take away from Thebes (I have it on good authority) three boat-loads of plunder of one kind or other—presented, no doubt, to his Prussian Majesty or to the Berlin Museum, as the *spolia opima* of Dr Lepsius's famous expedition. He left the evidence of his destructiveness on tomb after tomb, which, carefully described by Wilkinson as containing beautiful series of paintings, now present only incomprehensible fragments. I will give only one instance. Belzoni's tomb is the richest of all in art, in illustration of the religion and ceremonies of the Egyptians, as well as of their astronomy, besides having hundreds of square yards of hieroglyphics thickly interspersed with cartouches (or royal names). It is still painted as brilliantly as when the deeply-cut letters were first filled with bright colours. From one spot I counted twenty-five white blotches in the limestone, from four to ten inches in diameter, on a wall covered with hieroglyphics, quite perfect. There were as many more beyond my light and eye, no doubt. This was the work of Dr Lepsius. The effect is the same, and the injury similar to what would be produced by cutting out from the illustrated 'Froissart' of Francis I. at Paris all the royal and noble names through twenty pages. But this is not the whole of the case. From the nature of the close-grained limestone, it is evident that not one in three names or words could have been cut off whole; and therefore, the evidence obtained would be inferior to a wax or a paper cast, or a careful copy—all easily made. There is no work of art in this case, no value in the words except as evidence; and the characters are as plain as Dr Lepsius's many titles on his title-pages in Berlin. What, then, could be the motive which inspired this laborious robbery, if it were not to conceal from others what the energy of Belzoni and the money of England had made patent to all the world; and this where discoveries as to the period of Ozutasen or Sethos the First, the father of Rhamses (Sesostris), are most anxiously expected and sought for by those who are interested in Egyptian archæology—those very persons who buy and appreciate Dr Lepsius's books?"

* Observations on a Second Series of Ancient Egyptian Crania, by Samuel

But further, we have, it is believed, in the Copts, the remaining posterity of the once celebrated and civilized Egyptians. Now, the Copts are dark in colour, with flat heads, soft woolly hair, short nose, wide mouth, bent eyes, bandy legs, and large flat toes. Such, then, is the Egyptian, as seen on their monuments, and in their mummies, and in their descendants. "I never," says Madden, "found one with a broad expansive forehead."* And to reconcile all these difficulties, the only possible theory is that adopted by Dr Morton,† Hamilton Smith, and others, that among the inhabitants of Egypt there was an early mixture of races; the Caucasian, however, as Dr Morton says, being at first rare, and the other forms greatly predominating, and being possibly characteristic of the ancient Egyptians as a race.

The Copts are represented by Dr Morton as a mixture of Caucasian and negro.‡

Dr Latham's description of the Copts is—hair black and crisp, or curled; cheek-bones projecting; lips thick; nose somewhat depressed; nostrils wide; complexion varied, from a yellowish to a dark brown; eyes oblique; frame tall and fleshy; physiognomy heavy and inexpressive.§

On the origin of the term Copt, a learned paper will be found in the Ethnological Journal.‖ The writer thinks it is a contraction of the word Aiguptoi, the ancient Greek name for the Egyptians. From it came *Gupt*, and hence *Copt*. This Greek name, he thinks, was itself derived from the ancient name of the country.¶

Hamilton Smith regards the Egyptians as composed originally of three nations amalgamated together. The Ethiopic,

Morton, M.D., pp. 7–9. In his Crania Americana he labours hard to disprove this resemblance to the negro, or negroid type, but his facts are against, and not in favour of, his views. See pp. 29, 31. On Egyptian mummies, as connected with this subject, see Prichard's Natural History, pp. 576–583, 3d edition.

* Travels in Egypt, vol. ii., p. 93. † Crania Americana, p. 28.

‡ See Ethnol. Journal, No. iv., p. 172. § Latham, p. 509.

‖ No. ix., pp. 488, 489. ¶ See Ethnol. Journal, No. ix., p. 495.

deb or black, with curly hair, long legs, thick lips, and very swarthy colour; the second a brown race, the Misraim; and the third a fairer tribe of Caucasians, the last comers, and a privileged body of conquerors, but not the authors of the civilization or the religion of the land.*

"Egyptian antiquity," adds Smith, "not claiming priority of social existence for itself, often pointed to the regions of Habesh, or high African Ethiopia, and sometimes to the north, for the seat of the gods and demigods, because both were the intermediate stations of the progenitor tribes." † There is, therefore, every reason to believe that the primitive Egyptians were conformed much more to the African than to the European form and physiognomy, and therefore that there was a time when learning, commerce, arts, manufactures, &c., were all associated with a form and character of the human race, now regarded as the evidence only of degradation and barbarous ignorance. It is thus demonstrable that there is nothing in the facts of the case to invalidate the record of Scripture in tracing to Noah and his descendants all the present varieties of the human family. On the contrary, while we can trace their growing posterity to every continent, we have evidence to show that their diversity of conditions, destiny, and character, is the result of the laws of nature acting in accordance with, and under the directions of, the will of the God of nature; and we can also demonstrate that stupendous monuments—as in the caves of Ellora and Elephantina, in the pyramids and temples of Ethiopia, and in the primitive works of Egypt—prove the existence of civilization and art among nations who were nevertheless more or less black and negroid in their character.

* Nat. Hist. Human Species, pp. 356, 357. † Ibid., p. 373.

CHAPTER II.

THE FORMER CIVILIZATION OF BLACK RACES OF MEN—CONCLUDED.

Sic genus amborum scindit se sanguine ab uno.—VIRG. ÆN.

FROM the facts we have adduced it seems to follow, that one of the earliest races of men of whose existence, civilization, and physiognomy we have any remaining proofs, were black or dark-coloured.* "We must," says Prichard, "for the present look upon the black races as the aborigines of Kelænonesia, or Oceanica,—that is, as the immemorial and primitive inhabitants. There is no reason to doubt that they were spread over the Austral islands long before the same or the contiguous regions were approached by the Malayo-Polynesians. We cannot say definitely how far back this will carry us; but as the distant colonizations of the Polynesians probably happened before the island of Java received arts and civilization from Hindustan, it must be supposed to have preceded by some ages the Javan era of Batara Gurn, and therefore to have happened before the Christian era."† The negro race is known to have existed 3345 years, says Dr Morton,‡ 268 years later than the earliest notice of the white race, of which we have distinct mention B.C. 2200.§ This makes the existence of a negro race certain about 842 years after the flood, according to the Hebrew chronology; or 1650 years after the flood, according to the Septuagint chronology, which may very possibly have been the original Hebrew chronology.

* Called by the Chinese, *le min*, or black-haired people. Hamilton Smith, p. 268.

† Prichard, vol. v., pp. 281 and 283, and pp. 39–48.

‡ Crania Americana, p. 88.

§ Pickering on the Races, p. 370; during the 12th Egyptian dynasty, that of the Hykshos.

There is thus ample time given for the multiplication and diffusion of man over the earth, and for the formation—either by natural or supernatural causes, in combination with the anomalous and altogether extraordinary condition of the earth —of all the various races of men.

It is also apparent from the architecture, and other historical evidences of their character, that dark or black races, with more or less of the negro physiognomy, were, in the earliest period of their known history, cultivated and intelligent, having kingdoms, arts, and manufactures. And Mr Pickering assures us that there is no fact to show that negro slavery is not of modern origin. The degradation of this race of men, therefore, must be regarded as the result of external causes, and not of natural, inherent, and original incapacity.

This conclusion has been denied by Camper, Soemmering, and Cuvier, and by naturalists of less authority, who affirm that the black races are inferior to the European in organization, and therefore in intellectual powers.*

But on this position it is observed, *first*, that the crania examined are usually from the most unfavourable tribes, and from few and unfavourable specimens among those tribes; the crania of some of the negro tribes, as of the Caffres, being as large and anteriorly prominent as those of Europeans.† *Secondly*, the skulls of the ancient Egyptians, notwithstanding all their evidences of intelligence and civilization, and that, too, even at a comparatively modern date, when intermixed with Caucasians, are found many of them to have a negroid character. This is also the case, as Dr Tiedemann has shown, with the skulls of the ancient Germans. "Judging," he says, "by the capacity of the crania, the brain of some of our uncivilized British ancestors was not more developed than the average-sized negro's brain."‡ And *thirdly*, considered

* Tiedemann on the Brain of the Negro, in the Phil. Trans., 1838, p. 497.

† Prichard, vol. ii., pp. 359, 354; vol. ii., pp. 348, 228, 230.

‡ On the Brain. See quoted by Lyell in his Second Visit, &c., vol. i., p. 105; and see also Prichard's Nat. Hist. of Man, p. 193, &c.

even as they are now observed, Professor Owen is of opinion that "there is no modification of form or size in the negro's brain which would support an inference that the Ethiopian race would not profit by the same influences favouring mental and moral improvement, which have tended to elevate the primitively barbarous white races.* Such also is the opinion of Sir C. Lyell,† and of Combe, who thinks many of the African nations "greatly excel several of the tribes of native Americans."‡ Hamilton Smith is also of the opinion that the development of brain depends much on education, and has been effected in the African race in this country. "The moment," he says, "either typical stock is in a position to be intellectually excited by education, it is progressive in development in succeeding generations."§

Contrasting the negro and Caucasian races, Professor Caldwell, M.D., says: "In both individuals, however, we find the brain, which we regard as the seat of the moral principles, precisely alike, except that in the African it is somewhat smaller. Morality is seated neither in the skin, the nose, the lips, nor the bone of the leg. Being an intellectual rather than a corporeal quality, it is believed to be the offspring of the brain, which, except in point of size, is precisely the same in the African as the European."||

Dr Tiedemann, however, who is profoundly able, and by extensive opportunities better fitted than most others for the investigation, has, as we have seen, laboriously analyzed the comparative size of the skull and brain of the negro and European races, and denies their essential inequality.¶

This leads to the remark that there are two facts in the history of human beings, so uniform that they may be re-

* Quoted by Lyell in his Second Visit to the United States, vol. i., p. 105.

† Ibid., pp. 101, 208, 282, 283.

‡ Essay in Dr Morton's Crania Americana, pp. 271, 272.

§ Nat. Hist. of Human Race, pp. 194, 132.

|| Inquiry, &c., in The Portfolio, p. 13.

¶ On the Brain of the Negro, &c., in Roy. Phil. Transactions for 1838, p. 498.

garded as fixed laws, and with both of which the present condition of the black race is in perfect consistency. The first is, that it has been the invariable fact that every race of men, when left to the natural progress of corruption and depravity, unaided by the influence of pure religion and all its accompanying stimulating and civilizing benefits, have declined and fallen from a state of advancement in knowledge, art, and science, to a condition of ignorance, vice, and degradation, which, if not prevented by the means alluded to, terminates in absolute barbarism. This law of downward progress, when not restrained by the civilizing and impelling force of true religion, is, we believe, universal in the past history of our race, as is illustrated both by sacred and profane writings.* The present condition of degradation to which many races of men have sunk who have lost all relics of a true and pure religion, is therefore in perfect consistency with the fact that they were, in the primitive period of their history, civilized and enlightened—as is seen in the present Copts, Abyssinians, Ethiopians, and Bushmen. The want of these divine influences led to the corruption and decay of Assyria, Babylon, Greece, Rome, and Egypt.

> "The soil, the sun, but not the slave the same.
> . . . No foreign foe could quell
> Their soul, till from themselves they fell;
> Yes, self-abasement paved the way
> To villain bonds and despot sway."*

A remarkable illustration of this fact is found in the natives of some parts of Ireland. On the plantation of Ulster, and afterwards on the success of the British against the rebels of 1641 and 1689, great multitudes of the native Irish were driven from Armagh and the south of Down into the mountainous tract extending from the barony of Flews eastward

* Prichard, Nat. Hist., p. 123; see also pp. 279, and 170; see also similar views in Pickering on Races of Men, pp. 183, 185, 186, 187, 189, 190, 202; see also Modern Universal Hist., vol. xviii., pp. 94, 100, 303, &c.

† See Kennedy's Nature and Rev., chap. v.; and Scott's Refutation of Combe, chap. ii., and p. 512.

to the sea;—on the other side of the kingdom the same race were exposed to the worst effects of hunger and ignorance, the two great brutalizers of the human race. The descendants of these exiles are now distinguished physically by great degradation. They are remarkable for "open projecting mouths, with prominent teeth and exposed gums, and their advancing cheek-bones and depressed noses bear barbarism on their very front." In Sligo and Northern Mayo, the consequences of the two centuries of degradation and hardship exhibit themselves in the whole physical condition of the people, affecting not only the features but the frame, and giving such an example of human deterioration *from known causes*, as almost compensate, by its value to future ages, for the suffering and debasement which past generations have endured in perfecting its appalling lesson. "Five feet two inches upon an average, pot-bellied, bow-legged, abortively featured; their clothing a wisp of rags; these spectres of a people who were once well grown, able-bodied, and comely, stalk abroad into the daylight of civilization, the annual apparitions of Irish ugliness and Irish want." In other parts of the island, where the population has never undergone the influence of the same causes of physical degradation, it is well known that the same race furnishes the most perfect specimens of human beauty and vigour, both mental and bodily.*

The other law of human nature alluded to is the fact, that there is a point of degradation to which, when any people have once sunk, they never have, and never can, elevate themselves without external aid. This position will be found illustrated, in an irresistible manner, by Archbishop Whately in his Lectures on Political Economy, to which our readers are referred.† It is also strongly presented in the London Ethnological Journal.‡ "Let there be pointed out any one

* See an excellent paper on the population of Ireland, in the Dublin University Magazine, No. xlviii., pp. 658–675.

† Lectures iv. and v., and Append.; see p. 111, third edition.

‡ P. 31, vol. i.

nation or race of men which has changed its physical peculiarities, or any portion of them, without mixing its blood, and we give up our theory. Or let there be pointed out any one nation or race which once existed in a barbarous state, and subsequently raised itself to civilization, without mixing its blood or receiving instruction from foreigners, and we give up our theory. The whole of history is before our opponents. We ask only for a single well-ascertained fact, and we renounce our opinion. On the other hand, we shall support our own views not by a few facts, but by evidence the most extensive, precise, clear, and unmistakeable. No one surely can object to these conditions, yet we offer them without the slightest fear, for we have no interest in our opinions except in so far as they are true; and that which is really true, is true in all cases. One clear, unexceptionable fact would, therefore, be as decisive in our judgment as ten thousand. But if one such fact existed, ten thousand analogous ones would be apparent, for the subject is too widely ramified not to present a vast amount of evidence bearing on one side or the other."

"Let the reader pass in review before his mind the leading facts in the history of any country where barbarism once reigned and was succeeded by civilization, and then say whether or not this civilization was consequent and dependent upon foreign intervention." The continuance, therefore, of several races of men for an indefinite length of time, in a condition of degradation to which they have fallen, and into which they have been left without the only proper means of elevation and the only adequate application of these means, is just what we should expect in regard to *any* race of men in similar circumstances.*

And since it is impossible for us to conceive that God would leave any race of men to enter upon their career, under circumstances which would necessitate their barbarian degradation, we are compelled to believe that the first condition of

* See also Humboldt's Personal Travels, iii., p. 208, in Kirby, 44.

mankind was one of civilization; that it is to God men are indebted for language, speech, agriculture, government, and arts; and that their subsequent degradation is the result of forgetfulness of God, his law, and his worship.*

And who will say that the black race in America, and every where—*in proportion* to the direct and efficient inculcation of moral and religious truth, and their enjoyment of the social and religious blessings of Christian cultivation—are not manifesting signs of awakening progress? Every where this race is swelling like the billows of a rising tide. "The force of negro expansion," says Hamilton, "is felt coming from the centre of Africa. It presses upon the Caffres, the Abyssinians, and the coast of Nigritia. Morocco is already ruled by black sovereigns, and the antique semi-Circassian tribes of the north part have greatly diminished."†

On the whole, therefore, there is no ground, either from history or science, to question the truth of the Scripture history of the original unity and equality of all men, or that they are still, however much varied in character and condition, one species.

In regard to the blacks, Dr Lawrence says: "I have shown that the striking peculiarities of the African organization, and particularly the great difference between its colour and our own, have led many persons to adopt the opinions of Voltaire,—who had not sufficient knowledge of physiology and natural history to determine the question,—that the Africans belong to a distinct species. I have shown, in the preceding divisions of this article, that there is no one character so peculiar and common to the Africans, but that it is found frequently in the other varieties, and that negroes often want it; also, that the characters of this race run by insensible gra-

* See, in addition to the previous references, Guyot's admirable work, Earth and Man, lect. x., xi., xii.

† We have seen that Blumenbach had a library of works written by negroes. See Gregory on the literature of the negroes, and Chambers's Tract on the same subject.

dations into the neighbouring races, as will be immediately perceived by comparing together different tribes of this race, as the Foulahs, Jaloffs, Mandingoes, Caffres, and Hottentots, and carefully noting how in these gradual differences they approach to the Moors, New Hollanders, Arabians, Chinese, &c."*

After pointing out the varieties existing among the negro tribes of Africa, Dr Prichard remarks in a similar manner: "These observations can hardly be reconciled with the hypothesis that the negroes are one distinct species. We might more easily adopt the notion that there are among them a number of separate species, each distinguished by some peculiarity, which another wants; but on that supposition the deviation will be so gradual from the physical character of other human races, as to undermine the ground on which the opinions of a specific and strongly-marked distinction has been founded. SEPARATE SPECIES OF ORGANIZED BEINGS DO NOT PASS INTO EACH OTHER BY INSENSIBLE DEGREES. The more accurate are our researches into the ethnography of this region of the world, the less ground do we find for the opinion that the characteristic qualities of human races are permanent and undeviating."†

"It appears then," adds Dr Prichard,‡ "that there is no character whatever in the organization of the brain of the negro which affords a presumption of inferior endowment of intellectual or moral faculties. If it be asserted that the African nations are inferior to the rest of mankind on the ground of historical facts, and because they may be thought not to have contributed their share to the advancement of human arts and science, we have, in the first place, the example of the Egyptians to oppose to such a conclusion; and this will be allowed by all to be quite sufficient, if only we may be permitted to reckon the Egyptians as a native African tribe. But if we are confined to nations who are strictly

* Lectures on Man, p. 283.

† Researches, vol. ii., pp. 341, 342, 345. ‡ Ibid., vol. ii., pp. 533, 534.

negroes, it will be sufficient to point out the Mandingoes, as a people who are evidently susceptible of mental culture and civilization. They have not, indeed, contributed towards the advancement of human arts and science, but they have shown themselves willing and able to profit by these advantages when introduced among them."

NOTE.

BLACK REPRESENTATIONS OF CHRIST AND THE VIRGIN.

Mr Seymour, in his Pilgrimage to Rome (3d ed., pp. 434–437), in speaking of the miraculous pictures at Rome, says:—

"These miraculous pictures are generally pictures of the Virgin Mary, or rather of some female face supposed to represent that of the Virgin. Some of them are black, representing her *as a negress;* some are of a very deep and dark shade, as deep and dark *as an Indian.* But in some, where our Lord is introduced, the Virgin is painted *black* and our Lord *white.* A curious example of this may be seen in the Spanish collection at the Louvre, where the Virgin is represented as a black, and our Lord on her knee as a white!

"The origin of these pictures is unknown, and the reason of their peculiar colouring is unknown. The universal belief of the people, and the universal profession of the priests, is, that they were painted by St Luke the Evangelist. How they ascertained that he was a portrait-painter it is not easy to say, but they teach it as a matter of certainty; and he is frequently represented in pictures as in the act of painting the Virgin, who is quietly sitting for her likeness. I have in my possession a copy of one of these, and there is in the academy at Rome a very fine one attributed to Raphael. It is not possible however to see the pictures ascribed to St Luke, without feeling that he was a very poor proficient in the art, as well as a very laborious one; and that the Virgin was quite as patient as she was black, and as ugly as she was amiable. I have myself seen about thirty portraits of Mary, all said to have been taken by St Luke, and all representing her as very dark and very plain. I have heard of at least as many more.

"There are two solutions of the difficulty, as to the origin of these singular pictures.

"One is that which asserts, that at the beginning of the art of painting, between the time of Cimabue and Giotto, there lived an

artist whose name was Luke. He was a holy man, according to the holiness of his times, and confined himself to painting pictures of the Virgin Mary. Those pictures are certainly belonging to that age, as every judge of the art is aware; and as this Luke was called the Holy Luke, *i. e.*, Saint Luke, he soon became confounded by the roguish monks and ignorant people with Saint Luke the Evangelist. This is a very probable solution of the difficulty as to the origin of these pictures, and the dark colour of some of them may be accounted for by their great antiquity; some of them being smoked with incense and lamps, and very dirty, and if cleaned would perhaps be not much darker than the pictures of some other artists in the same infancy of painting.

"But yet there are many of those pictures which cannot be accounted for on this hypothesis. I am disposed to ascribe to these a very different origin. On the final destruction of the Christian churches in Africa, many Christians fled to Italy and brought these pictures with them. At a still later period, many who had gone on pilgrimage to the Holy Land, and many who had joined in the crusades, and later yet, many who fled to the West from the armies of the Turks, brought with them from the East pictures representing her as of the deep and dark colour not unusual in the East, while those from Africa brought portraits showing Mary as of the African colour. I have myself seen a crucifix in the Island of St Domingo, on which the figure of our Lord was extended as large as life, painted perfectly black, as the blackest negro; and he was so painted by the negroes themselves. It was no more than natural that they should regard him as like themselves. In the same way the pictures in Italy may be regarded as painted in Africa or the East, and afterwards brought to Italy, where certainly they are very curious, not only for their colour, but also as specimens of the infancy of the art. They are generally regarded by the people as miraculous, and as painted by Luke; and the reputation for sanctity which they have obtained has led to their imitation. Among the mountains of Switzerland, a little beyond the great convent of Engleberg, and close under Mount Titlis, I observed erected by the side of the path a little figure of the Virgin and child. She was painted as a negress!"

APPENDIX, No. II.

CHAPTER I.

THE POWER OF EXTERNAL CAUSES TO MODIFY SPECIES.

Professor Lowe, in his very able and extensive work* on "The Domesticated Animals," has some important and valuable observations strongly confirmatory of our own conclusions:—

By species we designate animals resembling one another in their essential characters, and possessed of the power, common to the vegetable and animal kingdoms, of reproducing individuals similar to themselves and to one another. Now, in the past eras, as in the present, we find animals essentially alike, and which we infer were possessed of the power of reproducing the like forms. A question which enters into the fair range of philosophical inquiry may arise, Whether, in the course of immense periods of time, these species have been so modified, in obedience to some grand system of natural laws, as to become suited to new conditions of external nature; or whether each mutation has been a new act of creative power, called forth as the occasion arose to produce a new race of beings? We cannot, certainly, resolve this problem by any knowledge we possess of the actual

* On the Domesticated Animals of the British Islands; comprehending the Natural and Economical History of Species and Varieties, the Description of the Properties of External Form, and Observations on the Principles and Practice of Breeding. By David Lowe, Esq., F.R.S.E., Professor of Agriculture in the University of Edinburgh. London: Longman, Brown, Green, and Longmans.

changes of animal species; and it is only from analogy that we can venture to infer that the operation of the same laws, under which species have been called forth by the decrees of an Omnipotent Power, may have adapted species to new states of existence. Animals, it may be believed, must be suited to the conditions of external nature under which they are called to exist. The digestive organs must be adapted to the nature of the aliment from which the system of the body is built up and sustained, and the respiratory organs to the physical and chemical constitution of the elements which the living creatures respire; and when great changes take place in the relations of living bodies with food, air, and other external agents, either we must suppose that the species perish utterly, or that they become adapted to the new conditions in which they are placed. The temperature of this earth, and, consequently, of the air and water with which it was in contact, must at one period have been exceedingly great, as measured by the sensations of animals now living; and with the temperature, the physical and chemical relations of the solids and fluids of the globe must have varied. We cannot suppose that the pristine ocean contained the same earthy, saline, and other constituents, in the same proportions as the present seas, or that the atmosphere, with respect to density and other conditions, was the same as now. But variations in the conditions of external nature having taken place from era to era, we have equal reason, at least, to believe that corresponding changes have taken place in the form and attributes of species, as that alternate destruction and creation have been the law of nature.

Although, then, we cannot, with many physiologists, maintain that species are immutable and exempt from the laws of change, to which all organic matter seems subject, we can say that species may remain unchanged for periods of time beyond any to which our inquiries, for the purposes of useful inferences, need extend. It is matter of merely speculative inquiry, whether now, as in all the period of the past, the

earth, the air, and the relations which connect external nature with the living kingdom, are not undergoing progressive though insensible changes, which may, in the course of unmeasured periods of time, react upon all the existing species, not excepting man himself. It suffices for us to know that species are to us realities, and remain constant in their essential characters for a time which we cannot compute.

But there is a class of changes in organic forms which fall more within our cognizance, and which merit our attention in an especial degree; this is the class of changes which produce what we term Varieties or Races, in which the specific type is generally so far preserved, that the animals may, with more or less certainty, be referred to it, although very often the divergence is so great that nothing can be traced beyond the affinities which we term generic. The human races, as well as the lower tribes, are subject to this class of changes, under the influence of temperature, food, habitudes, and other agencies.

Man, it has been seen, of all the mammalia, constitutes a genus into the circle of which none of the tribes, even the nearest to him in conformation, enters. Many divisions have been made of the different groups of men, according to the external characters, habits, traditions, and affinities of speech which have been supposed to connect them, &c.

Looking at the great diversities which present themselves in these different races of the human family, a natural curiosity prompts us to inquire whether they are of one species, and whether, on the assumption that they are of one species, they have sprung from the same stock, and spread over the earth from some common centre; or whether they have been called into existence either contemporaneously or at different epochs, according as the different parts of the earth became fitted for their reception.

If by species we understand animals possessing certain characters in common, which we term specific, and having the power, which we see them to possess, of reproduc-

ing creatures having the same characters, there can be no difficulty in admitting that all the races of man, in so far as they have yet been examined, are of one species. If, indeed, we are to place beside a Persian of Ispahan, or a mountaineer of the Caucasus, a negro of the Gambia, with his sooty skin, his wool-like hair, his projecting jaws; or a Bushman of the Gariep, with his pigmy form, his yellow hue, his restless eye; or a savage of Van Diemen's Land, with his lank hair, his large head, his slender limbs: we might find it hard to believe that creatures so unlike were identical as species. But, great as the differences of external form here are, we fail to discover any difference of conformation which can be regarded as essential, or which we should call specific. The individuals of the most dissimilar tribes breed freely with one another, and the progeny has nothing of a hybridal character, but is as fruitful as the parents from whom it springs; and however dissimilar the races in question may appear in their external characters, there is nothing like that great dissimilarity which we continually see in creatures admitted to be of the same species—as the wild and domesticated hog, and our dogs of all sorts.

The other question—whether the human races have all sprung from the loins of the same parents, or have been called into existence in different regions contemporaneously or at different epochs?—though continually mixed with the question as to the identity of the species, is in no respect necessarily involved in it. *Although we see far greater differences in the characters of animals, produced by agencies which we can trace, than in the different races of mankind, and therefore may reasonably believe that all men have proceeded from a common centre, and then have assumed, in the course of great periods of time, the characters which they now retain;* yet this does not resolve the question as to which was the mode which the Creator, in his infinite wisdom, ordained for peopling the earth which he had called into existence, whether by diffusing the species from one region of the earth, or from more than one.

We can know nothing, then, by means of the unassisted reason, of the production of the human species; and if we are permitted to reason concerning the times and modes of its diffusion over the earth, we must call to our aid analogy and reasonable probabilities, unless we are to assume that the dispersion of man was itself a miracle, exempt from the common course of natural events. It were rash, nay, impious, to assert that man could not be, or has not been, called into existence in one part of the earth's surface, and dispersed as from a common centre to all the parts of the world which he now inhabits.

But treating the question as one on which we may lawfully employ our judgment, it is reasonable to inquire, whether it be more consonant with the known course of natural events to infer that different races of men—though within the limits of the same specific form, and so creatures of the same kind—had been called forth in different regions of the earth to occupy it, or that one race only, and this produced in a single spot of a boundless surface, had been called into existence? We must remember that the time which chronology assigns to the period of the dispersion—little more than 2000 years before the birth of our Saviour—is a period wonderfully short for such mighty changes. And it is hard to conceive, that within periods of time approaching to this, human creatures can have transported themselves through desolate, and even yet almost inaccessible regions, to the most distant islands of the remotest seas,—nay, lived and multiplied, until every trace of their ancestry had been lost, until every art which they had carried with them, even to every word of their own tongue, had been forgotten, and until they themselves had receded so far from the pristine type of their race as to leave the naturalist to question whether they were not to be classed with an inferior tribe of beings. These are great difficulties, not to be removed by tracing the similarity of speech and customs by which different sections of mankind are connected. For what does this similarity of speech and cus-

toms, even where it seems to be the most clearly established, prove? It may prove the relations established between tribes and nations after ages of strife, migrations, and admixture of races, but it cannot prove the relations between pristine tribes, every trace of whose very existence may have been lost.

It will be seen, then, that great difficulties present themselves to the supposition of the derivation of all the varieties of mankind from a common centre, at least within the period which chronology assigns to the existence of the human race; nor are difficulties of a different kind wanting under any hypothesis we can form. It is not, however, necessary, with relation to our present inquiry, to pursue this subject. Whether we suppose all men to be of the same species, derived from a common centre, or of the same species, derived from different centres, we equally reason on the assumption that great changes have been produced on the individuals by the influence of the agents affecting them. If we adopt the hypothesis of one centre of dispersion for all the races of mankind, we must suppose that change of place has converted the white man into a negro, and may convert the negro into a white man. If we suppose that the primary races of the species were spread from different centres—as the negro from some part of intertropical Africa; the Caucasian, from some country of Western Asia; the Mongolian, from some region of the East; the Polynesian, from one or more foci in the innumerable islands over which he has spread; and the American, from regions proper to the great continent to which he belongs, and so on—we do not, therefore, infer that these races are not severally subject to the influence of external agencies, and capable of undergoing great mutations, under different conditions of food, temperature, and habits. The negro has all his grosser features softened as he recedes from the burning regions of swamp and jungle, where his most typical form is developed; the Kalmuk loses much of his harsher features as he becomes naturalized towards the confines of Europe, and even assumes a new aspect when forced to in-

habit the glacial regions of his own continent; the Turcoman approaches more to the squat and sturdy form of the Mongolian Tartar as he extends eastward; while the Hindoo, acclimated in the valley of the Ganges, differs so widely from the native of the plains of Germany, that the aspect alone of the individuals would not allow us to identify them as being of a common lineage. These changes are the result of external agencies, and may be regarded as the adaptation of the animal form to new conditions. But the effect, as it may act on the organism of the Negro, the Mongolian, the Caucasian, the Malay, must differ in each, and hence a great apparent multiplication of races throughout the whole world may take place, although it may be the effect of the same agents acting on a few distinct primary forms.

If from the human species we turn to the inferior animals, we shall find the like evidences of the power of external agents to modify the animal form, and adapt it to new conditions of life. Certain animals, in the state of nature, have a limited habitat, and so present characters nearly uniform throughout; others have a very wide range of place, in which case we never fail to find them more or less modified in their forms and habits. The common wolf, the most bold and savage of the canine family, stretches over the greater part of the old continent, and is found in the new, from Behring's Straits to near the Isthmus of Panama. Under these immense limits, he often seems so changed that he can scarcely be referred to the same specific type. The bear extends from Norway along the limits of the arctic regions, and thence to the Caucasus and all eastward, wherever woods suited to his habitudes exist, but so changed that he can scarcely be identified with the brown bear of the Norwegian Alps. In these and other cases, the changes produced furnish continual matter of debate to zoologists, whether the animals are to be regarded as distinct species, or as varieties of the same species.

The changes produced on animals in a state of nature by different circumstances, as the nature of the country they in-

habit, the means of obtaining their food, temperature, and altitude, are often very great; but it is when they are reduced to the domesticated state, that all the changes which they are capable of undergoing are manifested in the greatest degree. Sometimes, as in the case of the dog, it would seem as if the influence of human reason worked a charm upon their nature, nay, modified the form of their bodies, as if to suit them for new services. Sometimes, by the mere supply of aliment different in kind from that which they procure in the natural state, or in greater quantity, the form of the body changes, and with this their instincts and habits; and, farther, this change in their conformation is capable, under certain limits, of being transmitted to their descendants, and, by continued reproduction, of producing a new breed, variety, or race.

The wild hog, which extends over the greater part of the old continent, is the undoubted progenitor of the common domesticated races of Europe. When this powerful and solitary creature is subjected to domestication, we shall find in the sequel that not only his form, but all his habits change. He may be said, in fact, to become a new species, and he transmits all his acquired characters to his descendants. The parts of his conformation regarded as the most constant in the discrimination not only of species but of genera, change under the new relations in which he is placed. In the wild state, he has six incisor teeth in the upper, and six in the lower jaw; but under the effect of domestication, the number is generally reduced to three in each jaw. The number of his dorsal, lumbar, sacral, caudal vertebræ, vary so much, that it may be asserted that he differs far more from the hog in the state of liberty, than many animals regarded as distinct species differ from one another.

Amongst ruminating animals, the ox and the sheep are subject to great changes of form and character, dependent upon the kind and abundance of aliment. With increased supplies of food, the abdominal viscera become enlarged, and other parts partake of corresponding modifications of form.

To suit the increased size of the stomach and intestinal canal, the trunk becomes larger in all its dimensions; the respiratory organs adapt themselves to the increased dimensions of the alimentary canal, which is indicated to the eye by a change in the form of the chest; the limbs become shorter and farther apart, and the body being nearer the ground, the neck becomes more short; various muscles from disuse diminish in size, and the tendency to obesity increases. With the form of the animals, their power of active motion diminishes, and they acquire habits adapted to their changed condition. These new characters they communicate to their progeny, and thus races, differing from those which, in the state of nature, would exist, are produced.

The carnivorous animals, in like manner, when taken from the state of nature and made to reproduce in a state of slavery, manifest their subjection to the same laws of change. The size and proportion of their organs of digestion and respiration, nay of the brain, the organ of thought, change; and with these, the relative proportion of the head, limbs, and other parts, as we shall see in the sequel in the case of the dog, which becomes almost plastic under the habitudes to which we inure him.

And if we turn from quadrupeds to the feathered tribes, we shall find the like proofs of the power of food and habitudes to change the form, and with it the very instincts of the animals. The domestic goose is derived from the wild of the same species, which inhabits the boundless marshes of northern latitudes. This noble bird visits us on the approach of the arctic winter, in those remarkable troops which all of us have beheld cleaving the air like a wedge, often at a vast height, and sometimes only recognised by their shrill voices amongst the clouds. When the eggs of this species are obtained, and the young are supplied with food in unlimited quantity, the result is remarkable. The intestines, and with them the abdomen, become so much enlarged, that the animal nearly loses the power of flight, and the powerful muscles

that enabled him when in the wild state to take such flights, become feeble from disuse, and his long wings are rendered unserviceable. The beautiful bird, that outstripped the flight of the eagle, is now a captive without a chain. A child will guide him to his resting-place with a wand, and he is unable to raise himself by flight above the walls of the yard that confines him, and he gives birth to a race of creatures as helpless and removed from the natural condition as he himself had become. The wild duck, too, affords us a similar example. This wary bird arrives in flocks from the vast morasses of the colder countries. Many pairs remain in the swamps, pools, and sedgy rivers of lower latitudes; but the greater number retrace their flight to the boundless regions where they themselves have been hatched, and where they can rear their young in safety. If the eggs of this bird be taken, and the young be supplied with food in the manner usual in the domestic state, the animals will have changed the form, instincts, and habits of the race. Like the goose, they lose the power of flight by the increased size of their abdomen, and the diminished power of their pectoral muscles, and other parts of their body are altered to suit this conformation. All their habits change. They lose the caution and sense of danger which, in their native state, they possessed. The male no longer retires with a single female to breed, but becomes polygamous, and his progeny lose the power and the will to regain the freedom of their race. The swan, the noblest of all the waterfowls, becomes chained, as it were, to our lakes and ponds, by the mere change of his natural form.

The common gallinaceous fowls, in the state of nature, live amongst trees, and, when subjugated, still retain the desire to roost on elevated objects. But they can now with difficulty ascend the perches prepared for them. Their abdominal viscera having extended, their bodies have enlarged posteriorly, the breast has become wider, and the neck more short; and their wings having become insufficient to support the increased weight of their bodies, they have almost lost the power of

flight; and so changed is their entire conformation, that naturalists can but conjecture from what parent stock they have been derived.

Besides the effect of increased or diminished supplies of food in modifying the animal form, much is to be ascribed to temperature, humidity, altitude, and, consequently, the rarity or density of the air. The effect of heat is every where observed, as it modifies the secretions which give colour to the skin, and the degree of covering provided for the protection of the body, whether wool or hair. In the case of the human species, the effects of temperature on the colour of the skin, and with this on the colour of the eyes and hair, are sufficiently known. We cannot pass from the colder parts of Europe to the warmer, without marking the progressive diversities of colour, from the light complexion of the northern nations to the swarthy tinge of the Spaniards, Italians, and Greeks; and when we have crossed the Mediterranean into Africa, the dark colour, which is proper to all the warmer regions of the globe, every where meets the eye. The Jews, naturally as fair as the other inhabitants of Syria, become gradually darker, as they have been for a longer or shorter time acclimated in the warmer countries; and in the plains of the Ganges, they are as dark as Hindoos. The Portuguese who have been naturalized in the African colonies of their nation have become entirely black. If we suppose, indeed, the great races of mankind to have been called into existence in different regions, we must suppose that they were born with the colour, as well as the other attributes, suited to the climates of the countries which they were to inhabit. It accords with this supposition, that the negro remains always black, even in the highest latitudes to which he has been carried, and that the black races of the eastern islands retain the colour proper to them in the mild temperature of Van Diemen's Land. The Mongolian, even in the coldest regions of Northern Asia, retains the hue distinctive of his family, but with a continually deepening shade as he approaches to

the intertropical countries. The native of China, of a dull yellow tint at Pekin, is at Canton nearly as dark as a Lascar. The American Indian retains his distinctive copper hue amid the snows of Labrador, but on the shores of the Caribbean Sea becomes nearly as black as an African.

Temperature likewise affects the size and form of the body. The members of the Caucasian group towards the arctic circle are of far inferior bulk of body to the natives of temperate countries. The Central Asiatics, in elevated plains, are sturdy and short, the result of an expansion of the chest; the Hindoos are of slender form and low physical powers, so that they have almost always yielded to the superior force of the northern nations, from the first invasion of the Macedonians, to the ultimate establishment of European power in the Peninsula. The Negro, on the other hand, in the hottest and most pestilential regions of the habitable earth, where the Caucasian either perishes or becomes as slender as a stripling, is of a strength and stature which would be deemed great in any class of men, affording a strong presumption in favour of the opinion of the distinctness of his race, and its special adaptation to the region in which it has been placed.

In quadrupeds, the effects of temperature are every where observable in the covering provided for their body, whether wool or hair, and which, in the same species, is always more abundant in the colder than in the warmer countries. In all quadrupeds there is a growth of down or wool underneath the hair, and more or less mixed with it. In warm countries, this wool is little if at all developed; but in the colder, it frequently becomes the principal covering of the skin, forming, along with the hair, a thick fur. In the warmest regions, the domestic sheep produces scarcely any wool; in temperate countries he has a fleece, properly so called; and in the coldest of all, his wool is mixed with long hair, which covers it externally. The wool, an imperfect conductor of heat, preserves the natural temperature of the body, and thus protects the animal from cold, while the long hair is fitted to throw off

the water which falls upon the body in rain or snow. But in the warm season, the wool, which would be incommodious, falls off, to be renewed before winter, while the hair always remains. The dog, too, has a coat of wool, which he loses in countries of great heat, but which in colder countries grows so as to form, along with the hair, a thick fur, so that in certain cold countries there have been formed breeds of dogs to produce wool for clothing. The dogs of Europe conveyed to warm countries frequently lose even their hair, and become as naked as elephants; and in every country their fur is suited to the nature of the climate.

Similar to the effects of temperature is that of humidity, the hair becoming longer and more oily in the moister countries. Even within the limits of our own islands, the ox of the western coasts, exposed to the humid vapours of the Atlantic, has longer hair than the ox of the eastern districts. Even the effect of continued exposure to winds and storms may modify parts of the animal form. There are certain breeds of gallinaceous fowls which are destitute of the rump, so called. Most of the common fowls of the Isle of Arran, on the coast of Scotland, have this peculiarity. This little island consists of high hills, on which scarcely a bush exists to shelter the animals which inhabit it from the continued gales of the Atlantic. The feathers of a long tail might incommode the animals, and therefore, we may suppose, they disappear; and were peacocks to be reared under similar circumstances, it is probable that, in the course of successive generations, they would lose the beautiful appendage which they bring from their native jungles.

The effects likewise of altitude are to be numbered amongst those which modify the characters of animals. In general, the animals of mountains are smaller and more agile than those of the same species inhabiting plains. In man, the pulse increases in frequency as he ascends into the atmosphere, so that while at the level of the sea the number of beats is 70 in a minute, at the height of 4000 feet the number

exceeds 100. The air being rarer, a greater quantity of it must be drawn into the lungs to afford the oxygen necessary to carry off the excess of carbon in the system. But gradually as man and other animals become naturalized in an elevated country, the digestive and respiratory organs, and with these the capacity of the chest and abdomen, become suited to their new relations. Humboldt remarks on the extraordinary development of the chest in the inhabitants of the Andes, producing even deformity; and he justly observes that this is a consequence of the rarity of the air, which demands an extension of the lungs.

The effects have been referred to of use or exercise in modifying certain parts of the animal form. The limbs of many animals inured or compelled to speed, become extended in length, as of the dogs employed in the chase of the swifter animals. The limbs of an animal deprived of the means of motion become feeble and small, as the wings of domesticated birds. In the natural state, the cow has a small udder, yet sufficient to contain the milk which her young requires; in the domesticated state, by milking her, the organ becomes enlarged, so as to contain a quantity of milk beyond what the wants of her offspring demand. Nor are the characters thus acquired confined to the individuals on which they have been impressed, but may be transmitted to their posterity. Some of the wild horsemen of the plains of South America are from infancy continually on horseback, and their limbs are observed to become slender and almost unfit for walking, which characters reappear in the children of the tribe. Amongst the causes, then, which tend to form varieties, are to be numbered the habitudes of animals, whether in the wild or domesticated state.

Of the means by which the animal organism becomes adapted to new relations, we know nothing. We see that within the limits of the specific form, animals become suited to the nature and abundance of their aliment, to the condition of the external air with respect to temperature, humidity,

and density, and to the habits imposed upon them for obtaining their vegetable food when they are herbivorous, or capturing their prey when they feed on flesh; but how or why this is, we know no more than how or why animals assume and preserve the form proper to their species. We may well believe that species are called forth, and their forms placed in the fitting relation with external nature, in obedience to some grand system of natural laws, the results of which we may hope in certain cases to trace, but of the efficient cause of which we cannot hope to obtain a knowledge. But when we speak of causes in common language, we do not, it is well known, refer to what metaphysicians term efficient causes, but to the antecedents of those phenomena, which we term effects; and it is in this sense that we say that the causes of the varieties of animal species are food, climate, habitudes, and the other agencies whose effects we have the means of observing.

But all the causes enumerated would not of themselves be sufficient to form permanent varieties or breeds, were it not for that other law of the animal economy by which animals are enabled to communicate the characters acquired to their progeny, and by which the latter are enabled to retain those characters with more or less constancy.

That animals which, from any cause, have acquired a peculiar conformation, may transmit the same properties of form to their young, and these again to their descendants, has been matter of observation in every age. The greyhound communicates to his progeny the flexible neck, the long back, the slender agile limbs, which fit him for capturing his prey by speed; the bloodhound transmits his expanded nostril, fitted for that surpassing sense of smell which enables him to follow the evanescent traces of his victim upon the ground; the bulldog transmits to his young his muscular form and powerful jaws. No one ever expects to see two greyhounds produce an animal like a terrier; two bloodhounds, one resembling a shepherd's cur; two bulldogs, any animal different in essen-

tial characters from themselves. And in all those varieties of the other domesticated animals which we term breeds, the constancy of the law of transmitted properties is alike manifested. The merino sheep communicates to its young the properties, which it has acquired on the mountain pastures of Spain, of producing a short unctuous wool,—and this in localities so different as in the granitic soils of Sweden, the plains of Siberia, the sands of the Cape of Good Hope, and the myrtle forests of New Holland. The horse of the Arabian deserts, wherever he is carried, communicates to his descendants the properties distinctive of his race. The great black horse of the meadows of Flanders transmits to his progeny the massive form and very colour which he has himself acquired; the racehorse of England, the conformation which adapts him to rapid motion; the pony of Norway, the characters which have fitted him for a country of heaths and mountains; and so on in every case where animals, by successive reproduction with one another, have acquired the common properties which constitute a breed.

In the human species, that similarity of features which is termed family-likeness is a familiar example of the same effect, not only manifesting itself in the immediate descendants, but reappearing often after several generations. The community of character which constitutes national resemblance is matter likewise of common observation. By the successive reproduction between the individuals of a tribe or nation, a common set of characters is by degrees acquired, which, becoming permanent, generate a true race. This effect is most notable in small and insulated tribes, whose members intermarry only with one another. In the American forests, many of the tribes of Indians can be distinguished from one another at a glance. In the case of the Celtic nations of Europe, the clans became frequently as much distinguished from one another by feature as by their mutual hatred; and the characters which they had acquired are in many cases retained by their descendants to the present hour. In the

countries of the East, where the barrier of caste had been established, all the distinctions of race are seen to be established, so that the members of different castes can be discriminated one from another, as readily as the inhabitants of distant countries.

It has been frequently observed, that what are termed accidental variations are susceptible of being transmitted and rendered permanent characters. Some persons have been born with six fingers or toes, and this peculiarity being transmitted, has continued in the same family for generations. The case of a family in England, whose bodies were covered with cuticular appendages resembling the quills of porcupines, has been often cited; and a breed of sheep in America was procured, having short limbs resembling those of an otter, and therefore termed the otter breed. We cannot, however, term such varieties accidental. There is nothing in the phenomena of nature to which the term accident can be justly applied. The characters were doubtless the result of some organic change proper to the animal in which they appeared, and their transmission to their progeny is only the exemplification of a law common to other cases of transmitted characters.

The permanence of characters acquired by varieties is often wonderfully great. In the sculptured monuments of the Egyptians, are to be found the delineation of features which may still be traced in the degraded Fellahs of the country. The Jews, after the lapse of many centuries, retain, in innumerable cases, the lineaments of their race; and although influenced in the colour of the skin by effects of temperature, may yet be discriminated, in countries where they have been naturalized, as a distinct people. The wandering tribes of gipsies, which are spread over a great part of Europe, retain, after many centuries, the essential characters of their race—the swarthy visage, the keen dark eye, the lank black hair. In India there exist whole tribes as much distinct in aspect as in speech and customs from all around them, al-

though every trace of their ancestry has been lost; and in the same country, the Parsees, driven beyond the Indus by the Mohammedans, seem to be nearly the same people as when expelled from their Persian homes. The Laplanders, amid the snows of the arctic regions, have preserved the colour and features indicative of their Asiatic descent; and the Negroes, reduced to bondage in a distant land, have preserved from age to age all the essential lineaments and characters distinctive of the African family.

In the case of the domesticated quadrupeds, we find similar evidences of the wonderful permanence of characters once acquired and imprinted on the animals. In certain breeds of oxen and sheep, the animals retain from generation to generation their distinctive marks,—the presence or absence of horns, the length and peculiar bending of these appendages, and even the minutest variations of colour, as spots of white or black on certain parts of the body. We are made acquainted with the peculiar colour of the horses of some of the barbarous hordes that entered Italy when the empire fell, as piebald and clouded, and the colour is yet preserved in some of the races of modern Italy.

The degree of permanence of the required properties of races may be supposed to bear some ratio to the time during which an intermixture of blood has been continued amongst the members of a common stock.

When two animals of dissimilar characters breed together, the progeny partake of the properties of both parents. It is only by continued reproduction between their descendants that a common class of characters is acquired and a true variety formed; and the longer this successive reproduction and intermixture of blood are carried on, the more permanent may the transmitted characters be supposed to become.

It appears, too, that the nearer animals are allied in blood, the more quickly is the similarity of characters distinctive of a breed acquired. In the practice of English breeders, it

has not been uncommon to unite brothers with sisters, and parents with their direct progeny, and to carry on this system for a long period. The physiological effect is remarkable, not only producing more quickly that community of characters which constitutes a breed, but affecting the temperament and constitution of the animals. Under this system long continued, the animals manifest symptoms of degeneracy, as if a violence had been done to their natural instincts. They become, as it were, sooner old; the males lose their virile aspect, and become at length incapable of propagating their race; and the females lose the power of secreting milk in sufficient quantity to nourish their young. These effects may not for a time be very observable; but, by carrying on the system sufficiently far, they never fail to manifest themselves. Dogs continually reproduced from the litter exhibit, after a time, the aspect of feebleness and degeneracy. The hair becomes scanty or falls off, the size diminishes, the limbs become slender, the eyes sunk, and all the characters of early age present themselves. Hogs have been made the subjects of similar experiments. After a few generations, the victims manifest the change induced in the system. They become of diminished size, the bristles are changed into hair, the limbs become feeble and short, the litters diminish in frequency, and in the number of the young produced, the mother becomes unable to nourish them; and, if the experiment be carried as far as the case will allow, the feeble and frequently monstrous offspring will be incapable of being reared up, and thus the miserable race will utterly perish.

In the state of liberty, these effects do not manifest themselves; the instincts of the animals, it may be believed, cause them to choose fitting mates for propagating their own race. In man, the continued alliance of individuals too near in blood is prevented by conscience and by feelings which seem innate. In carnivorous quadrupeds, what we term instinct supplies the place of judgment and reflection, and the females make choice of certain males in preference to others, by

which means, it is to be believed, the race is preserved from deterioration by unsuitable combinations. In the case of the social herbivorous quadrupeds, the end is attained by the males being possessed of the power and desire to expel the feebler members of the herd during the season of sexual intercourse. The bull, with his powerful neck, possesses only short blunted horns, fitted not to destroy his rivals by shedding their blood, but to expel them for a time from the herd. Thus he drives away the younger and feebler members, until compelled in his turn to yield to younger rivals. The ram is furnished with a thick forehead, fitted for butting, by which means he is enabled to stun, without destroying, his rivals of the flock. In the deer tribes are produced, at the season of sexual desire, those huge antlers by which the stronger males are enabled to terrify and subdue the weaker; but these organs are temporary, and, after the season of rutting, fall off, to be renewed at the fitting time in the following year. By these and other means, we are entitled to infer that a natural provision is made against the effects of unsuitable alliances of animals in the natural state. It is only when in the state of absolute slavery that we are enabled to overcome the instinctive feelings of the animals subjected to our power, and to compel them to relinquish, as it were, their natural appetites.

The characters which animals of the same species transmit to their descendants, so as to constitute varieties, are, we have seen, those of the body; but the mechanism of the body reacts upon the mind, and faculties which we term mental are therefore transmissive. No one can doubt that instinct is due to the mechanism of the nerves, and that even the higher attributes of reason are due to the development of the nervous system in the brain. But we can obtain by breeding animals with crania of different size and form, and consequently with brains of different capacity and powers. Thus we can produce, by exercise, and by selection of the parents, a dog, whose cranium shall be small and flat, corre-

sponding with the elongation of the muzzle, and which shall possess different propensities from another, whose brain, being rounder, is larger, and who is enabled to exercise faculties for our preservation and defence, which we cannot distinguish from reason.

The hog, we have seen, communicates to his posterity, along with his change of form, instincts and habits as different from those existing in the natural state as if he had become a new species. From being a nocturnal animal, he has acquired a desire to seek his food during the day, and from being solitary, he has become social, so that the male never, in a state of the utmost liberty we allow him, separates from his fellows of the herd. The subjugated birds convey to their descendants a new set of habitudes and propensities; they lose the once irresistible desire to retire in single pairs, and bring up the young apart, and become entirely polygamous. The greyhound, whose nose is small, and his body fitted for rapid motion, conveys, with the conformation of his organs, the desire of capturing his prey by speed alone. A puppy greyhound will, the first time he springs a covey of partridges, dash after them at speed; while the young pointer, with the great development which has been communicated to his nasal organ, will stand as if entranced, nay, if of a highly-cultivated breed, will couch upon the ground like the parents who had been disciplined to the act. The young terrier, the first time he sees a rabbit, will track him to his burrow. The young water-spaniel will strive to seize the objects which he sees floating in the stream, though he has never before beheld a rivulet. The young bulldog will fly at the throat of the first animal that assails him.

The racehorse, to which we have communicated the conformation which suits him for rapid motion, will manifest the fiery spirit proper to him by his mother's side a few hours after birth. The Arabian horse, with his broad and high forehead, indicating a larger development of the brain, manifests a far superior sagacity to the humbler horse of inferior

lineage. Of the breeds of the domestic sheep, some are acclimated in countries of heaths and mountains, and some in the richer plains. Each has acquired the conformation which suits him to these conditions. If we take the mountain-lamb from its mother's teat at the very birth, and bring it to the valley below, we shall find it still, when grown to maturity, prefer the smaller grasses, the wild thyme, and other plants of mountains, to the richer herbage, and betake itself to the arid eminences of its pasture-fields in preference to the sheltered hollows, and communicate these desires to its offspring. Are not such propensities as these mental, and the result of a conformation of the animal organs, and consequently transmitted from the parents to the young? Thus, habits acquired may assuredly be communicated from animal to animal. We cannot, indeed, suppose that a young puppy would turn a spit or dance to a tune because its parents had been taught to do so; but we can suppose that if a race of dogs had been compelled, from generation to generation, to dance and turn spits, they would acquire the conformation which would suit them to perform these offices; which would be nothing more than one of innumerable examples of the progressive adaptation of the form of animals to the uses to which they are habituated.

Even mutilation of the body may, in certain cases, produce partial changes of conformation, which, being communicated, become permanent characters. If one organ is injured or removed, a provision is frequently made to compensate the loss. In some parts of Scotland, it appears to have become a practice to scoop out the horns of young cattle, on the supposition that the animals would become more quiet, and less apt to attack or gore one another. It would appear that the system of the animal tended to repair the injury by a larger development of the bony ridge of the forehead, from which the osseous nuclei of the horns proceed; and that this process, carried on from generation to generation, became at length a character, so that a hornless breed was produced.

There is a race of shepherd's dogs in this country, in which it appears it had become a fashion to shorten the tails of the animals. Now, a diminution of the caudal vertebæ may produce a modification of the sacral in contact with them, and thus a peculiar conformation be communicated to the animals, which may become permanent by successive reproduction. Whether this be the origin of the peculiarity of the race of dogs in question, cannot be determined; but it is known that, when from any cause dogs are born destitute of tails, the peculiarity may be communicated to their descendants, and become permanent.

Characters, then, of form, and of habits and instincts the results of form, may be communicated from animals to their progeny, and form varieties, races, or breeds. We distinguish a species from a variety by this, that in the species we regard the modification of a higher or more general type, namely, of a genus, tribe, or family; in the variety, the modification of a lower or less general type, namely, of a species. But the variety is likewise the modification of the more general type, and there is thus far no distinction between the variety and the species. It may be said, indeed, that the characters of the species are more lasting than those of the variety; but unless we are to assume that the forms of animals are immutable, this is a difference in degree and not in kind, and a variety, therefore, does not differ in kind from a species. It may readily be supposed, then, that with respect to certain animals, questions may arise whether they be species or varieties. But if the only real difference between a species and variety be, that the characters of the one are more lasting than those of the other, innumerable cases must present themselves, in which we cannot determine whether a given animal be what we call a species or a variety; yet eager debates are continually carried on by naturalists, whether certain animals are to be regarded as species or varieties. Thus, the common wolf of America differs somewhat in aspect from the wolf of Europe, and some naturalists hold that he is specifi-

cally distinct; but all that we can truly say is, that the wolf of Europe and the wolf of America present varieties of that form which we term wolf, and our knowledge of the animal conducts us no farther. The domesticated dogs present greater varieties of form and characters than many animals which are considered to be specifically different. The question has arisen, whether these dogs are of different species or of one species? The resolution of the question, it is manifest, depends mainly upon the meaning which we assign to our own terms. If we are to include under the same specific form the long muzzle and slender limbs of the greyhound, and the short muzzle and stout limbs of the bulldog, then the greyhound and the bulldog are of one species; if we hold that the elongated muzzle and slender limbs of the one constitute a specific distinction, then the greyhound and the bulldog are of different species, according to our definition.

THE RELATION OF THIS SUBJECT TO SCRIPTURE AND TO INFIDELITY.

The argument employed by Archbishop Whately, in reply to those who endeavour to explain away the teaching of Scripture respecting evil angels, is so applicable to the analogous doctrine of the unity of the human races, that we here present an extract.*

It was pointed out that the existence and agency of evil spirits—impossible as it may be to explain it—is what must be acknowledged by any one who receives Jesus Christ and his apostles as God's messengers, commissioned to reveal to us a true religion. For they would not have been such, if they had either been ignorant of the truth in an important point connected with religion, or if they had wilfully deceived men.

* Scripture Revelations of Good and Evil Angels, l. iv., pp. 66–75. See all, and l. v.

And now observe how great is the new difficulty they raise up, in their rash and vain attempt. Him whom they acknowledge as having "come into the world to bear witness of the truth,"—Him and his apostles, they represent as not merely conniving at, but deliberately confirming and establishing a superstitious error. It cannot be said that this error was one unconnected with religion. The case is not at all like that of the employment in Scripture of expressions conformable to popular belief on points of astronomy. For revelation was not given for the purpose of instructing men in what relates to the earth's motion, and other matters pertaining to science. And accordingly, our Lord, and the prophets, and the apostles, spoke in popular language of the rising and setting of the sun and moon, because such language sufficiently conveyed their meaning, and any different expression would have been in those days wholly unintelligible.

But, indeed, one may even say, that relatively to us the sun does rise and set; since its position relatively to us is all that we mean, or are thinking of, when we speak of sunrise and sunset. And accordingly men do speak thus, even at this day, who are perfectly aware that it is the earth's revolution that causes the alternations of day and night.

"Suppose you bid any one proceed in a straight line from one place to another, and to take care to arrive before the sun goes down. He will rightly and fully understand you, in reference to the practical object which alone you had in view. Now, you perhaps know very well that there cannot be a straight line on the surface of the earth, which is a sphere [globe]; and that the sun does not really go down, only our portion of the earth is turned away from it. But whether the other person knows all this or not, matters nothing at all with reference to your present object; which was not to teach him mathematics or astronomy, but to make him conform to your directions, which are equally intelligible to the learned and the unlearned.

"Now, the object of the Scripture revelation is to teach

men, not astronomy or geology, or any other physical science, but religion. Its design was to inform men, not in what manner the world was made, but who made it; and to lead them to worship Him, the Creator of the heavens and the earth, instead of worshipping his creatures, the heavens and earth themselves, as gods."

But on the other hand, the error—supposing it such—to which Christ and his apostles are represented as "accommodating" themselves, was one not relating to speculative points of natural science, but intimately connected with religion; and it was moreover a matter in which the contradiction of the popular belief would have been easy and perfectly intelligible, being in fact the very doctrine then held by the Sadducees.

Nor can it be said that Jesus and his apostles merely left men in their belief, not thinking it worth while to undeceive them, and trusting that in time they would of themselves discover their mistake. On the contrary, our Lord and his followers very decidedly and strongly confirm the doctrine, by numerous express declarations.

And there are very many other passages in which our Lord and his apostles do not merely leave uncontradicted, or merely assent to, what is said by others as to this point, or merely allude to it incidentally, but go out of their way, as it were, to assist the doctrine most distinctly, and earnestly dwell on it.

An undue degree of deference is obtained by such persons as I have been speaking of, from their professing to be believers in Christianity. Their theories and their objections, which are, in fact, nothing new, are, in this way, enabled to assume a new shape. Formerly, all persons who rejected, or sought to invalidate the statements of our sacred writers, used to profess themselves opponents of Christianity. But in these days the same arguments, such as they are, are brought forward by persons professing themselves Christians, and proclaiming their high veneration for the gospel. It is

as if the assailants of some fortress should assume the garb of its defenders, and thus obtain admission within its walls that they might batter them more easily than from without.

And thus the unwary are liable to be deceived by being told that "sundry eminent divines hold so and so," and that "several learned theologians interpret this or that passage in such and such a way," and that "such is the opinion of Rationalists," that is, persons who give "rational" interpretations of all things, these professed theologians being merely reviewers of what was advanced long ago by avowed infidels, and their pretended "rational" interpretations being most extravagantly irrational.

And what makes these attacks the more insidious is, that they are made by several different persons of different views, each preparing the way for the next. One, perhaps, while professing—and very likely with sincerity—to be a believer in the truth of the gospel narrative generally, yet imputes to the writers a pious fraud in reference to such and such particular point. Another goes a step further, and considers them to have falsified their narratives in some other things which must have come under their own knowledge. And these again are followed by another, who rejects or explains away all the remainder as a tissue of fables.

And all these equally professing themselves Christians, it becomes difficult to determine where Christianity ends and infidelity begins.

I have thought myself bound, therefore, to take some notice of the groundless and fanciful theories and interpretations contained in books which probably most of you will never see, and which some of you perhaps will never even hear of; because I know that many persons are a good deal influenced by reports and obscure rumours of the opinions of some supposed learned and able man, without knowing distinctly what they are, and are likely to be made uneasy and distrustful by being assured that this or that has been disputed. and so and so maintained by some person of superior knowledge and

talents, who has proceeded on "rational" grounds, when, perhaps, they themselves are qualified by their own plain sense to perceive how irrational these fanciful notions are, and to form a right judgment on the matters in question.

What is revealed to us, therefore, in the Scripture on various points, and, among the rest, concerning evil spirits, is to be received (however different it may be from what we might have conjectured) with humble faith and reverend docility.

But what it is that is thus revealed, and for what reasons that revelation was bestowed—these are points on which we may be allowed with becoming caution to inquire.

INDEX.

PAGE

ADAM, meaning of, . 73
——— and dam, difference between, . . . 73
——— proper name of the race, . . . 78
——— why called the first man, . . . 77
Agassiz, his views of this question, and his theory tested, . . . 165
America, its languages, 220–224
Arguments for the unity of the human races, *resumé* of, ... 324
Amalgamation of all the human races, a proof of unity, 64
Analogous varieties in other animals, a proof of the human races, . . 278
Anthropology, . . 1
——————— defined, 5

Black races of men, former civilization of, . 353
Barratt, the address of, reviewed, . . . 186
Bushmen, account of, . 259

Christianity, adaptation of, to all the races of men, 118
——————— adaptation of, to the negroes, . . 128
Civilization, the first condition of man, . 239, 369
Cretins, account of, . 136

PAGE

Dokos, account of, . 259

Egyptians, physical character of the ancient, 359–365
Ethiopia, ancient and Scriptural meaning and knowledge of, . 105–111, 113
Ethnology defined, . 34
Experience of known changes among men, a proof of the unity of all the races, 242
External causes, power of, to modify species, . 376

Gradations among the various races of men, a proof of their unity, . . 278

Ham, descendants of, 103, 104
History, testimony of, to the unity of the human races, 225
Hybridity, the law of, a proof of the unity of the human races, . . 189

Lamarck's theory of man, 4, 33
Language, the nature, universality, and connection of, a proof of the unity of the human races, . 199

Man, whether to be classed with other animals or not, 1
—— in what class to be placed, 3
—— characteristics of, as

PAGE

distinct from, and superior to, the brutes, 199, 200, 6-30
—— number of races of, 33

Negro, superiority to, and distinctness from, the lower animals, . 12
——— Skull of, . . 266

Objections against the unity of the human races considered, . . 329

Plurality of origin in the races of men unphilosophical, . . . 330
——— uncharitable, 345
Presumptive arguments for unity of the human races, 55

Religious character of all the races of men, . 118

Scripture, the historical and doctrinal evidence of Scripture to the unity of the human races, . . 68
——— relevancy of its testimony, . . 68-71

PAGE

Scientific argument for the unity of the human races, 133
Species defined, . . 31, 32
——— nature and philosophy of, . . . 141
——— unity of, a proof of the unity of the human races, . . . 152

Tradition, testimony of, to the unity of the human races, . . . 225
Triple division of the human family, . . . 82-88
Twofold nature of the question of the unity of the human races, 50, 132, 133

Varieties of the human races—
——— number of, 33, 34
——— origin of, pagan, infidel, inspired account of, 35-42
——— importance of the question, . . 43-54
——— origin of, illustrated, chaps. xviii. and xix. 288
Veddahs of Ceylon, account of, ... 270

SCRIPTURAL INDEX.

GENESIS.

CHAP.	PAGE
1: 5, 8, 10, 26,	78
1: 26,	59, 78, 94
1: 26, 28,	78, 91
1: 28, &c.,	92
1: 1–11,	85
2: 5,	77
2: 23,	79
2: 23, 24,	90
3: 15,	76, 79, 93
3: 15–24,	78
3: 23,	77
4: 2, 9-20,	77
4: 14,	82
4: 17,	82
4: 26,	97
5: 1,	78, 91
5: 2,	78
5: 3,	78
5: 4,	82
6: 2,	78
6: 4,	97
9: 6,	78, 91
9: 6–9,	78
9: 18, 19,	83
10: 6,	115
10: 11,	85
10: 25,	84
10: 32,	84
11: 2, 9,	84, 85
11:	97

NUMBERS.

CHAP.	PAGE
16: 22,	79
27: 16,	79
31: 35,	78

DEUTERONOMY.

6: 13,	95
32: 8,	78
32: 8, 9,	84

2 SAMUEL.

6: 19,	98

1 CHRONICLES.

1: 19,	84
16: 3,	95

2 CHRONICLES.

14: 9,	116
16: 8,	116

ESTHER.

1: 1,	113
8: 7,	113

JOB.

10: 12,	79
27: 3,	79

PSALMS.

11: 4,	78
12: 1, 2, 8,	78
14: 2,	78
45: 5,	360
68: 31,	112
87: 4,	112

CHAP.	PAGE
Ecclesiastes.	
12: 7,	79
Proverbs.	
8: 31,	360
Song of Solomon.	
1: 5, 6,	360
Isaiah.	
18: 1,	115
45: 14,	112
49: 12,	114
51: 12,	111
52: 3, &c.,	79
53:	93
Jeremiah.	
13: 23,	109
Ezekiel.	
29: 10,	108, 115
30: 4–6,	108
30: 5,	110
30: 6, 9,	115
Zephaniah.	
3: 10,	112
Matthew.	
1: 18,	76
28: 18–20,	72
19: 24,	111
4: 10,	95
Mark.	
10: 6, 7,	90
16: 15, 16,	71
Luke.	
1: 35,	76
Acts.	
17: 26,	71
17: 26, 27,	91
Romans.	
1: 14,	112
1–3,	76
5: 19,	76
5:	78, 79, 93
6: 23, & 5: 12	76
1 Corinthians.	
5: 47,	97
13: 3,	97
15: 45, 47,	77, 97
15: 22,	76
Galatians.	
3: 19,	76
Ephesians.	
4: 24,	92
James.	
3: 9,	78
Hebrews.	
2: 11, 14,	76, 77
11: 3,	50, 68

THE END.

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